



INSTALLER GUIDE

Alpha

MODEL 647

INSET LIVE FUEL
EFFECT GAS FIRE
INCORPORATING THE VALOR



FireSlide
CONTROL

(GC No. 32-032-50)

**THIS APPLIANCE IS FOR USE WITH NATURAL GAS (G20)
WHEN CONVERTED USING CONVERSION KIT NO.0591149 THIS
APPLIANCE IS FOR USE WITH PROPANE GAS (G31)
THIS APPLIANCE IS FOR USE IN THE UNITED KINGDOM (GB) AND
THE REPUBLIC OF IRELAND (IE) ONLY.**

We trust that this Installer Guide gives sufficient details to enable the appliance to be installed and maintained satisfactorily. However, if further information is required, our

Valor Technical Helpline will be pleased to help.

Please telephone 08706 061 065 (National call rates apply in the United Kingdom).

In the Republic of Ireland call 0044 08706 061 065

INSTALLER: Please leave this guide with the owner

INSTALLER'S GUIDE

Safety First.

Valor fires are CE Approved and designed to meet the appropriate British Standards and Safety Marks.



Quality and Excellence.

At the heart of every Valor fire.

All Valor fires are manufactured to the highest standards of quality and excellence and are manufactured under a BS EN ISO 9001 quality system accepted by the British Standards Institute.



The Highest Standards

Valor is a member of the Society of British Gas Industries which works to ensure high standards of safety, quality and performance.



Careful Installation

Valor is a CORGI registered company. All our gas fires must be installed by a competent CORGI Registered Installer in accordance with our Installer Guide and should not be fitted directly on to a carpet or floor of combustible material.



Valor Heating, Erdington, Birmingham B24 9QP
www.firesandstoves.co.uk

Because our policy is one of constant development and improvement, details may vary slightly from those given in this publication

INSTALLER'S GUIDE

CONTENTS

CONTENTS	3
1. SAFETY	4
2. ACCESSORY LIST	4
3. APPLIANCE DATA	5
4. GENERAL INSTALLATION REQUIREMENTS	6
5. PACK CONTENTS	13
6. FIREPLACE CHECK	14
7. IGNITION CHECK	15
8. APPLIANCE PREPARATION	16
8.1 The Flue Restrictor	16
8.2 Appliance Preparation	16
8.3 Removing the burner module	18
8.4 Fitting the foam seal	18
9. GAS SUPPLY CONNECTION	19
10. FIREBOX INSTALLATION	20
10.1 Cable Retention	20
10.2 Floor Sealing	21
11. BURNER INSTALLATION	22
11.1 Fitting the burner	22
11.2 Fitting the firefront surround	23
11.3 Preliminary Burner Checks	23
11.4 Reference Pressure Check	24
12. FITTING THE CERAMICS	25
13. CONTROL CHECKS	27
13.1 Check the FireSlide Control	27
13.2 Fitting the Firefront casting	28
13.3 Check for Spillage	28
13.4 Flame Supervision & Spillage Monitoring System	29
14. FINAL REVIEW	30
15. SERVICING & PARTS REPLACEMENT	31
15.1 To Replace Burner Plaques	31
15.2 To Remove the Firefront surround	32
15.3 To Remove the Complete Burner Unit	32
15.4 To Remove the Ignition Microswitch	33
15.5 To Remove the Gas Shut-Off Microswitch	33
15.7 To Remove the Electronic Ignition Generator	34
15.8 To Remove the Thermocouple Interrupter Block	34

INSTALLER'S GUIDE

15.9 To Remove the Pilot Unit	35
15.10 To Remove the Shut-Off Tap	36
15.11 To Remove the Gas Flow Rate Controller	37
15.12 To Remove the Main Burner Injector.....	37
15.13 To Remove the Appliance from the Fireplace.....	38
SHORT LIST OF SPARES.....	39

1. SAFETY

Installer

- Before continuing any further with the installation of this appliance please read the following guide to manual handling
- The lifting weight of this appliance is 10.0 kg. One person should be sufficient to lift the fire. If for any reason this weight is considered too heavy then obtain assistance.
- When lifting always keep your back straight. Bend your legs and not your back.
- Avoid twisting at the waist. It is better to reposition your feet.
- Avoid upper body/top heavy bending. Do not lean forward or sideways whilst handling the fire.
- Always grip with the palm of the hand. Do not use the tips of fingers for support.
- Always keep the fire as close to the body as possible. This will minimise the cantilever action.
- Use gloves to provide additional grip.
- Always use assistance if required.

2. ACCESSORY LIST

The following accessories are available: -

<u>Description</u>	<u>Part Number</u>
LPG Conversion kit	0591149

INSTALLER'S GUIDE

3. APPLIANCE DATA

This product uses fuel effect pieces, burner compartment rear wall and gaskets containing Refractory Ceramic Fibres (RCF), which are man-made vitreous silicate fibres. Excessive exposure to these materials may cause irritation to eyes, skin and respiratory tract. Consequently, it is important to take care when handling these articles to ensure that the release of dust is kept to a minimum. To ensure that the release of fibres from these RCF articles is kept to a minimum, during installation and servicing we recommend that you use a HEPA filtered vacuum to remove any dust and soot accumulated in and around the fire before and after working on the fire. When replacing these articles we recommend that the replaced items are not broken up, but are sealed within a heavy duty polythene bag, clearly labelled as RCF waste. This is not classified as “hazardous waste” and may be disposed of at a tipping site licensed for the disposal of industrial waste. Protective clothing is not required when handling these articles, but we recommend you follow the normal hygiene rules of not smoking, eating or drinking in the work area and always wash your hands before eating or drinking.

This appliance does not contain any component manufactured from asbestos or asbestos related products.

	Gas	
	Natural (G20)	Propane (G31)*
Inlet Pressure	20mbar	37mbar
Input - Max. (Gross)	6.0kW (20,500Btu/h)	6.1kW (20,800Btu/h)
Input - Min. (Gross)	2.7kW (9,200Btu/h)	4.3kW (14,650Btu/h)
Burner Test Pressure (Cold)	17.0±0.75mbar (6.8±0.3in w.g.)	35.6±0.75mbar (14.3±0.3in w.g.)
Burner Injector	Bray Cat. 18 Size 400	Bray Cat. 15 Size 170
Pilot & Atmosphere Sensing Device	SIT Ref. OPNG9030	SIT Ref. OPLPG9222
Gas Connection	8mm pipe	
Ignition	Electronic. (Battery 9V PP3)	
Aeration	Non-adjustable	

* When converted using Kit 0591149

4. GENERAL INSTALLATION REQUIREMENTS

4.1 The installation must be in accordance with these instructions.

For the user's protection, in the United Kingdom it is the law that all gas appliances are installed by competent persons in accordance with the current edition of the Gas Safety (Installation and Use) Regulations. Failure to install the appliance correctly could lead to prosecution. The Council for the Registration of Gas Installers (CORGI) requires its members to work to recognised standards.

In the United Kingdom the installation must also be in accordance with:

All the relevant parts of local regulations.

All relevant codes of practice.

The relevant parts of the current editions of the following British Standards: -

BS 715 BS EN 1806 BS 5440 Part 2 BS 6891

BS 1251 BS 4543 Part 2 BS 5871 Part 1

BS 1289 Part 1 BS 5440 Part 1 BS 6461 Part 1

In England and Wales, the current edition of the Building Regulations issued by the Department of the Environment and the Welsh Office

In Scotland, the current edition of the Building Standards (Scotland) Regulations issued by the Scottish Executive.

In Northern Ireland, the current edition of the Building regulations (Northern Ireland) issued by the Department of the Environment for Northern Ireland.

In the republic of Ireland the installation must also conform to the relevant parts of:

- a) The current edition of IS 813
- b) All relevant national and local rules in force.

4.2 If the appliance is intended to be installed to a chimney that was previously used for solid fuel, the flue must be swept clean prior to installation. All flues should be inspected for soundness and freedom from blockages.

4.3 Any chimney dampers or restrictors should be removed. If removal is not possible they must be fixed in the open position.

4.4 In the United Kingdom (GB) special ventilation bricks or vents are not normally required in the room for this appliance.

In the Republic of Ireland (IE), permanent ventilation must comply with the regulations currently in force.

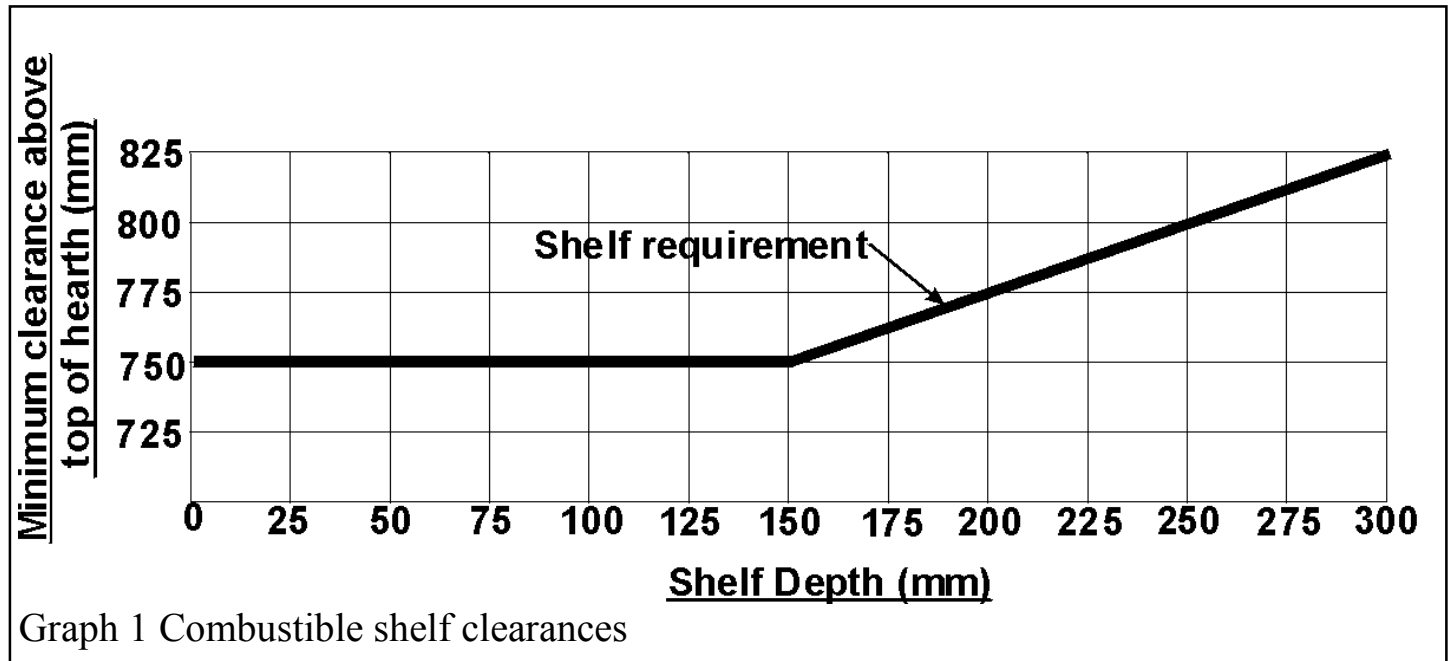
INSTALLER'S GUIDE

4.5 Note that soft wall coverings (e.g. embossed vinyl, etc.) are easily affected by heat. They may scorch or become discoloured when close to a heating appliance. Please bear this in mind when installing.

4.6 The minimum height required from the top surface of the hearth to the underside of any shelf made from wood or other combustible materials is shown below.

- For a shelf up to 150mm deep
Minimum height = 750mm.
- For a shelf deeper than 150mm
Minimum height = 750mm + 12.5mm for every 25mm depth over 150mm.

(See graph 1).



4.7 The appliance must not be installed in any room, which contains a bath, or shower or where steam is regularly present.

INSTALLER'S GUIDE

4.8 In the United Kingdom, as supplied, this appliance can be installed in the following situations: -

4.8.1 To a fireplace complying with BS1251 complete with surround and hearth as shown in figure 1. Removal of the fireback and sufficient material behind the fireback may be required to give the necessary debris catchment space. Alternatively, a spacer or surround may be used to provide the required depth. The free distance from the appliance flue outlet to a fireback knee or other projection in the fireplace must be at least 50mm (See figure 2).

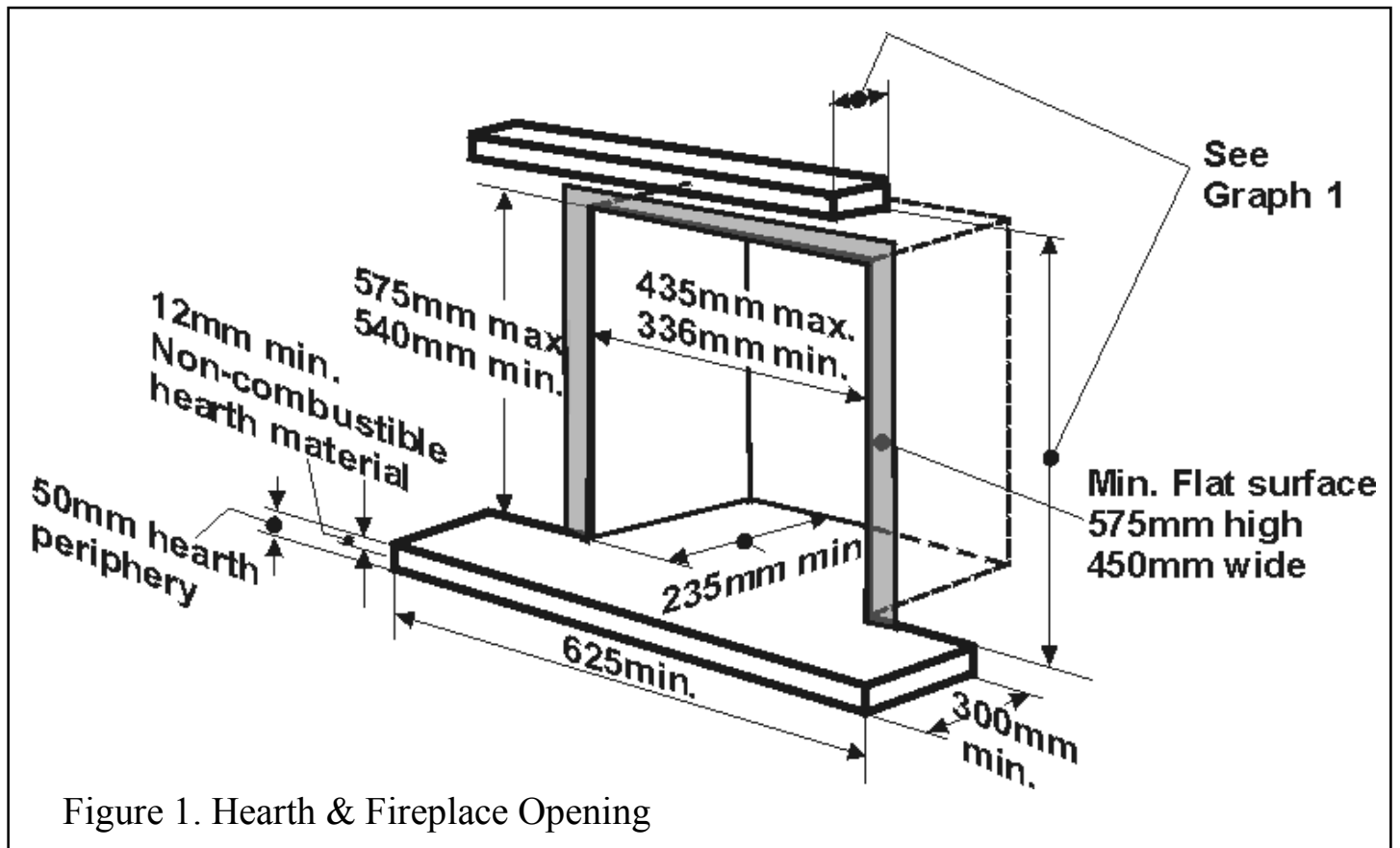


Figure 1. Hearth & Fireplace Opening

4.8.2 To a fireplace that has a precast concrete or clay flue block system conforming to BS1289 or BS EN 1806. The appliance is suitable for installations conforming to older versions of BS1289 as well as the current edition. The flue blocks must have a minimum width not less than 63mm and a cross-sectional area not less than 13,000mm². Older editions of BS1289 required a cross-sectional area of 13,000mm². The current revision of the standard requires 16,500mm². This appliance is suitable in both cases. The total depth of the opening measured from the finished front of the fireplace (Including

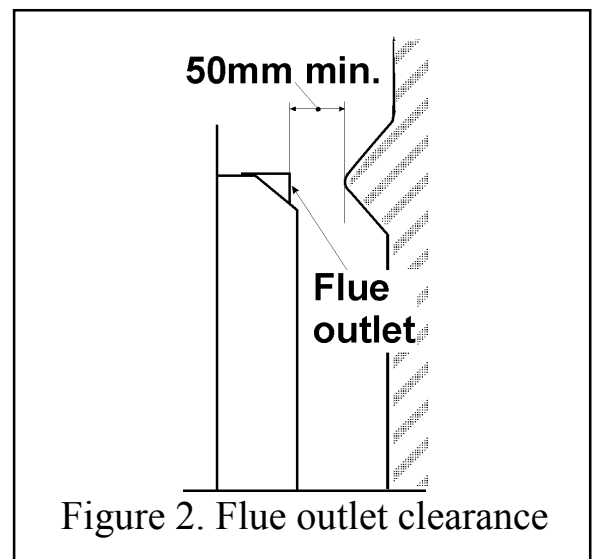


Figure 2. Flue outlet clearance

INSTALLER'S GUIDE

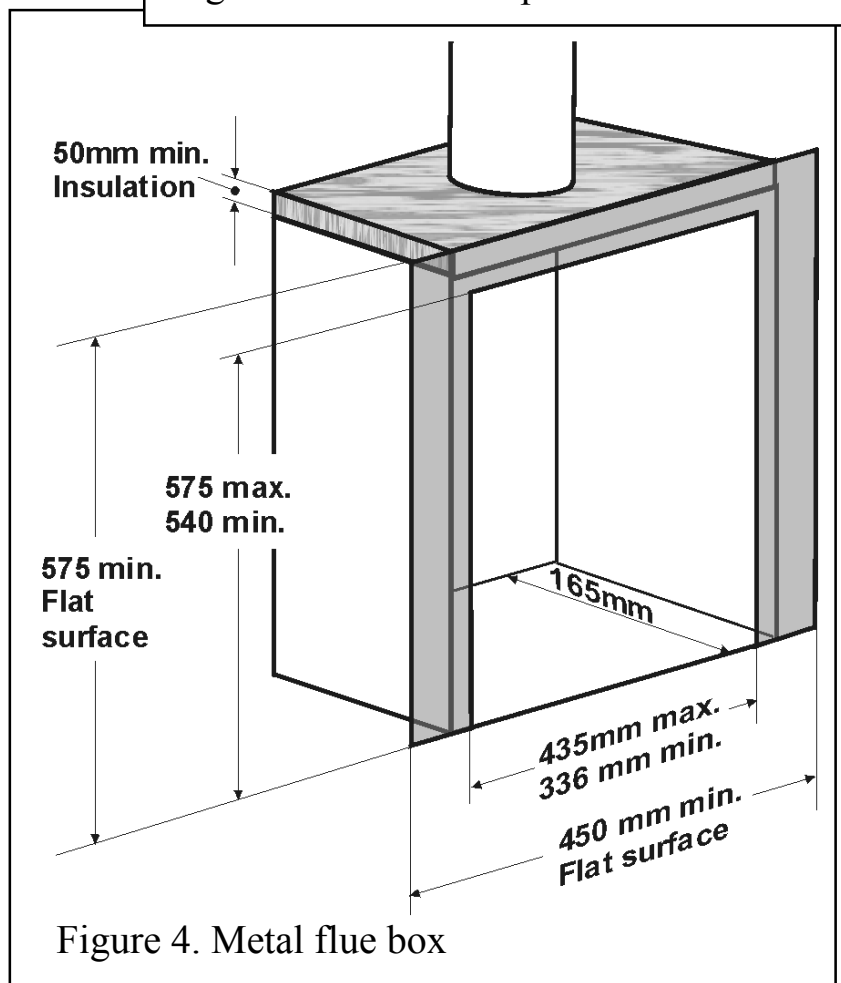
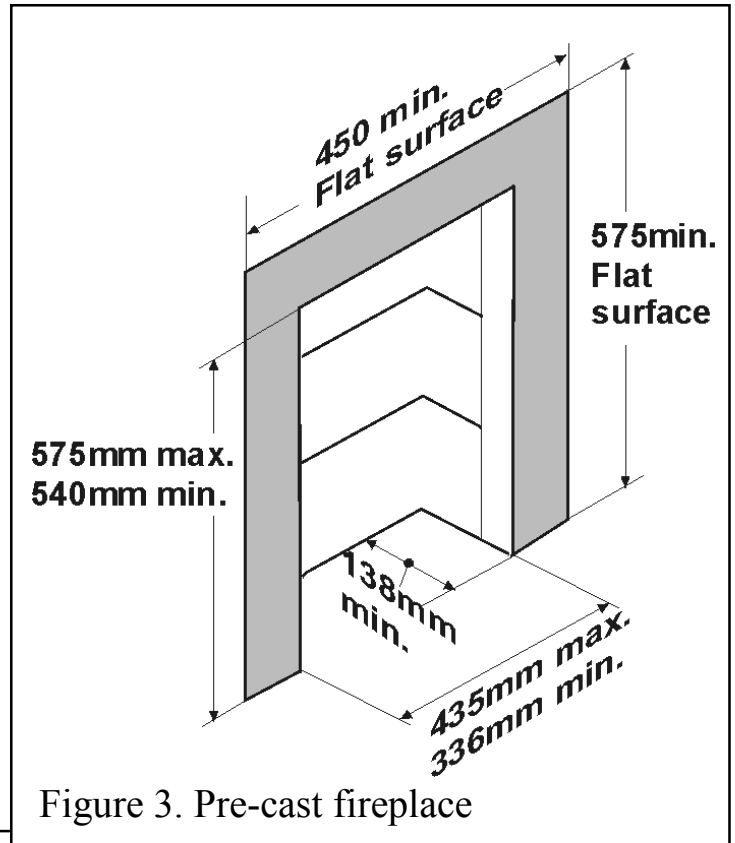
plaster, surround etc.) must be *not less than 138mm*. See figure 3.

The current versions of BS1289 and BS EN 1806 recommend that there should be an air space or insulation between the flue blocks and the plaster because heat transfer may cause cracking on directly plastered flues. However, generally this appliance is suitable for installations under all circumstances unless there is a history of cracking problems. Remember that faults such as cracking may be caused by poorly built and restrictive flues, e.g. mortar extrusions, too many bends, flue heights below three metres, restrictive terminations, etc.

4.8.3 A metal flue box conforming to

BS715 with a minimum internal depth of 165mm. Incombustible mineral wool insulation of not less than 50mm thickness must be applied to the top surface of the firebox and it must stand on a non-combustible hearth. See figure 4.

4.8.4 If the fireplace opening is greater than the acceptable dimensions given in this guide, do not use the back of a fire surround or marble to reduce the opening. This may cause cracking of the surround back or marble.



INSTALLER'S GUIDE

4.9 The following flues are suitable:

It should be noted that, as with many appliances, sharp bends or horizontal runs in metal flues at the top of the system can be a cause of problems in these types of installation.

- 225mm x 225mm conventional brick flue.
- 175mm diameter lined brick or stone flue.
- 200mm diameter factory made insulated flue manufactured to BS4543.
- 175mm diameter flue pipe. See BS6461 Part 1 for suitable materials.
- Single wall, twin wall or flexible flue liner with a minimum diameter of 125mm. The materials to be used are stainless steel or aluminium as specified in BS715. The liner must be sealed to the surrounding area above the fireplace opening and to the top of the chimney. An approved terminal must be fitted.
- A properly constructed precast concrete or clay flue system conforming to BS1289 or BS EN 1806. This system is only suitable if the conditions stated in section 2.9.2 are met.

4.9.1 The flue must conform to BS 5440: Part 1 in design and installation.

The flue, measured from the bottom of the fireplace opening to the bottom of the terminal, shall be not less than 3m in actual vertical height. When calculated in accordance with BS 5440: Part 1 Annex A, the minimum **equivalent** height of the flue shall be 2.0m of 125mm dia. flue pipe.

4.9.2 The flue must be clear of any obstruction and its base must be clear of debris.

4.9.3 The flue must be completely sealed so that combustion products do not come into contact with combustible materials outside the chimney.

4.9.4 The flue must serve only one fireplace.

4.10 If the fireplace opening is an underfloor draught type, it must be sealed to stop any draughts.

4.11 An extractor fan may only be used in the same room as this appliance, or in any area from which ventilation for the appliance is taken, if it does not affect the safe performance of the appliance. Note the spillage test requirements detailed further on in this manual. If the fan is likely to affect the appliance, the appliance must not be installed unless the fan is permanently disconnected.

4.12 A fireguard complying with BS6539 or BS6778 should be fitted for the protection of young children, the elderly, or the infirm.

4.13 The appliance is fitted with an A.S.D (Atmosphere sensing device). If the appliance closes down after a period of operation for no apparent reason, the consumer should be informed to stop using the appliance until the installation and appliance have

INSTALLER'S GUIDE

been thoroughly checked. The A.S.D will shut the appliance down if an unacceptable amount of harmful products of combustion accumulate. Under no circumstances should the A.S.D be altered or bypassed in any way. Only a genuine manufacturers replacement part should be fitted. The individual A.S.D components are not replaceable.

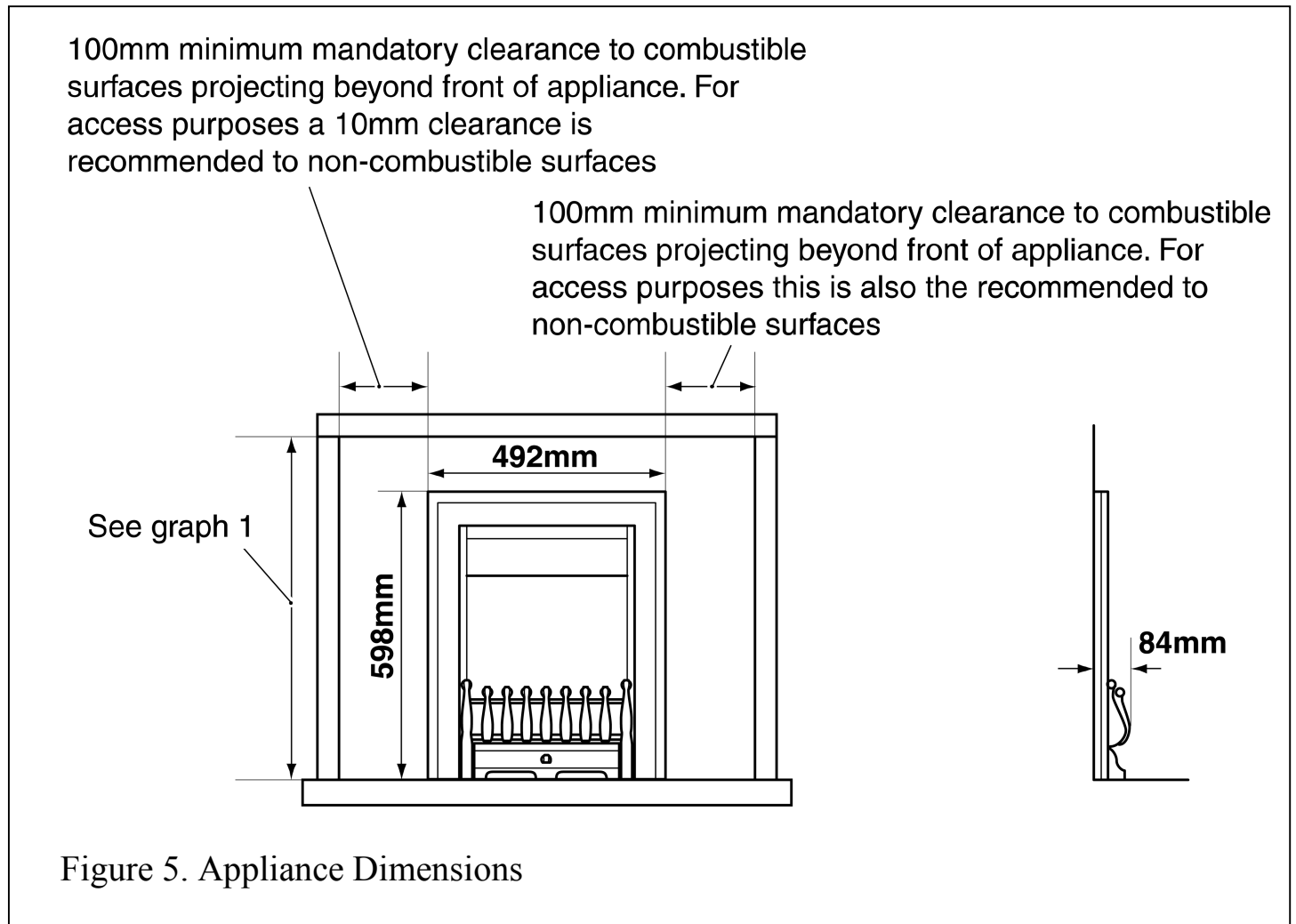
4.14 The appliance must be mounted behind a non-combustible hearth (N.B. conglomerate marble hearths are considered as non-combustible). The appliance can be fitted to a purpose made proprietary class "O"-150°C surround. The hearth material must be at least 12mm thick. The periphery of the hearth (or fender) should be at least 50mm above floor level to discourage the placing of carpets or rugs over it. The surface of the hearth must be sufficiently flat to enable the bottom of the front surround and the bottom front cover to be aligned horizontally. Any excessive unevenness (uneven tiles, Cotswold stone, etc.) should be rectified. The appliance must not stand on combustible materials or carpets.

4.15 Propane gas appliances must not be installed in a room, which is built entirely below ground level (See BS 5871 Pt2).

4.16 Proprietary terminals must comply with BS 715 or BS 1289. Any terminal or termination must be positioned in accordance with BS 5440 Part 1 to ensure that the products of combustion can be safely dispersed into the outside atmosphere. Where the appliance is connected to an unlined brick chimney it is generally unnecessary for the chimney pot to be replaced or for a terminal to be fitted unless the flue has a diameter smaller than 170mm.

INSTALLER'S GUIDE

4.17 The minimum allowable distance from the outside of the appliance case to a corner wall having combustible material or any other combustible surface which projects beyond the front of the appliance is 100 mm at either side. On the right hand side this is also the minimum recommended clearance to non-combustible surfaces to allow for access. On the left hand side a 10mm access clearance from a non-combustible surface is recommended (See figure 5)



INSTALLER'S GUIDE

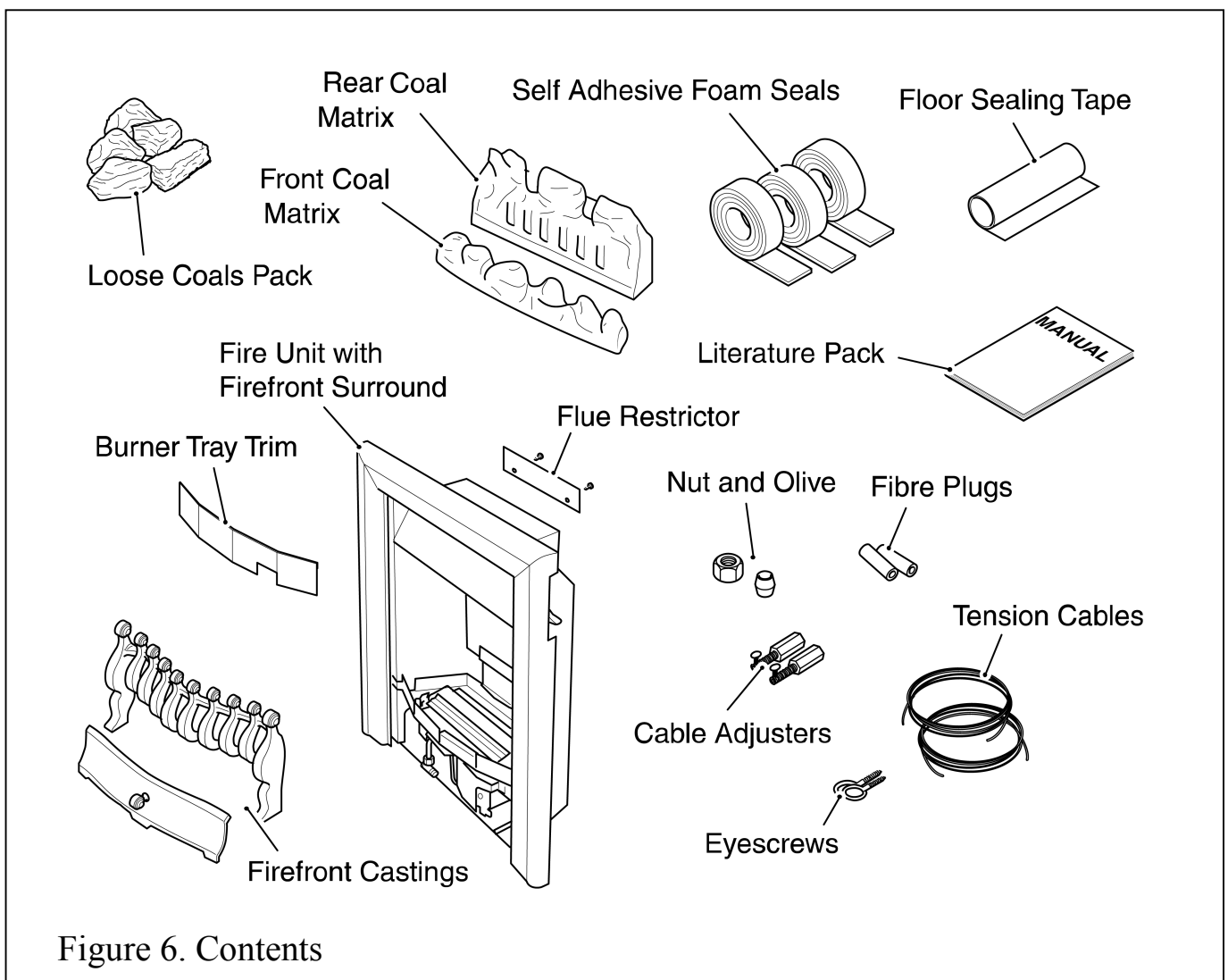
5. PACK CONTENTS

5.1 Pack Contents

The carton contains the following: -

- | | |
|-------------------------------------|--|
| 1 Fire unit with Firefront surround | 2 Tension Cables |
| 1 Literature Pack | 2 Cable Adjusters |
| 1 Front coal Matrix | 2 Eyescrews |
| 1 Rear coal Matrix | 2 Fibre Plugs |
| 1 Loose coals Pack | 1 Flue restrictor with 2 securing screws |
| 1 Burner tray trim | 1 Strip of Floor Sealing Tape |
| 3 Self-Adhesive Foam seals | 1 Nut and Olive for 8mm Inlet Pipe |

Remove all the items carefully to prevent damage. Take special care when handling the ceramic components. Some items may be contained in the packaging fitments - Examine the packaging carefully before discarding. Check that all the items are present and undamaged.



INSTALLER'S GUIDE

6. FIREPLACE CHECK

1. The fireplace must comply with all the requirements of section 2.

2. Fireplace General Condition

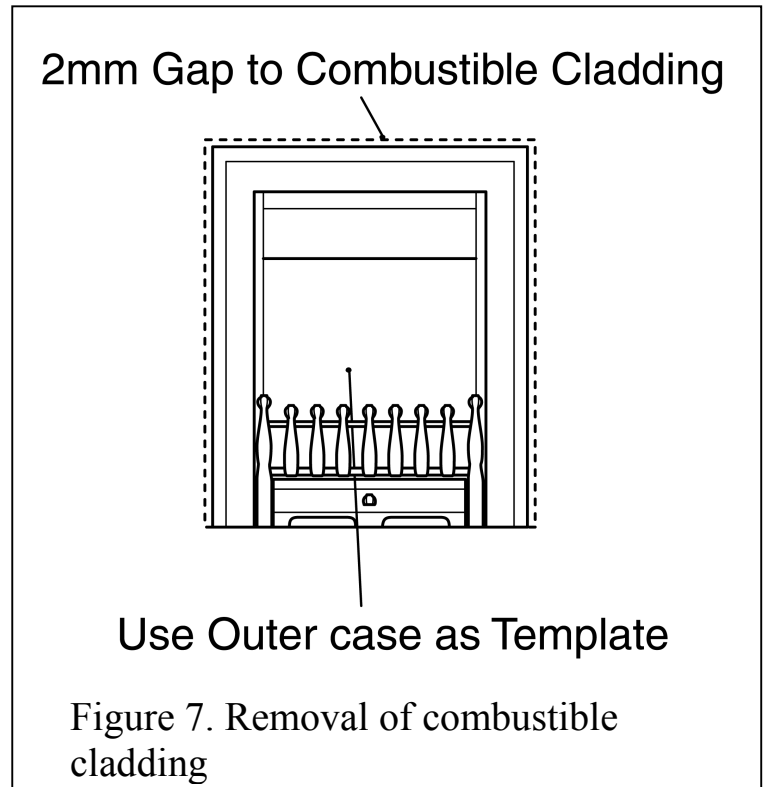
The fireplace floor should be reasonably flat to ensure that the convection box can be installed without it rocking and so that a good seal can be made at the bottom front of the box. The front face of the fireplace should be reasonably flat over the area covered by the convection box top and side flange seals to ensure good sealing. These faces should be made good if necessary. If the appliance is to be fitted against a wall with combustible cladding, the cladding must be removed from the area covered by the outer surround (see figure 7). We suggest that the actual surround is used as a template to mark the area for combustible cladding removal and that this area is increased by at least 2mm all round.

4. Installations using a metal flue box

The whole of the top surface of the metal flue box must be covered with a layer of mineral wool or equivalent insulation at least 100mm thick. See figure 4.

5. Fireplace Flue Pull

Close all doors and windows in the room in which the appliance is to be installed. After confirming with a match that smoke is drawn into the flue, light a 13 gram smoke pellet and check that there is a definite flow through the flue. Verify outside that the smoke exits from one terminal only and that the termination is suitable. Observe where possible, upstairs rooms and loft spaces for signs of escaping smoke indicating a defective flue. If there is not a definite flow warm the flue for a few minutes and repeat the smoke pellet test. If there is still no definite flow the flue may need remedial work – **Do not fit the appliance until there is a definite flow through the flue.**



INSTALLER'S GUIDE

7. IGNITION CHECK

Before attempting to install, it is worth checking that the electronic ignition system performs satisfactorily.

- Fit the battery to the ignition block located below the burner tray at the left side (see figure 8). The positive terminal (+) is to the right as you insert.
- Depress the slider as far as it will go. This should close the ignition circuit. Sparks should be seen tracking from the electrode pin to the thermocouple tip. See figure 9.
- If there are no sparks make the following checks.
 - a.* Check condition of battery and that it is correctly fitted.
 - b.* Check spark gap between electrode wire and thermocouple tip. See figure 10.
 - c.* If *a* & *b* are satisfactory, check the ignition circuit and components - see the servicing section in this manual.

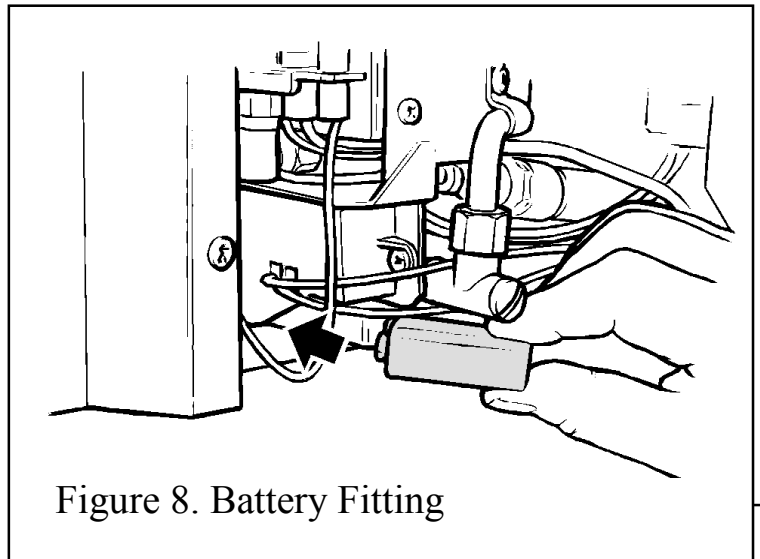


Figure 8. Battery Fitting

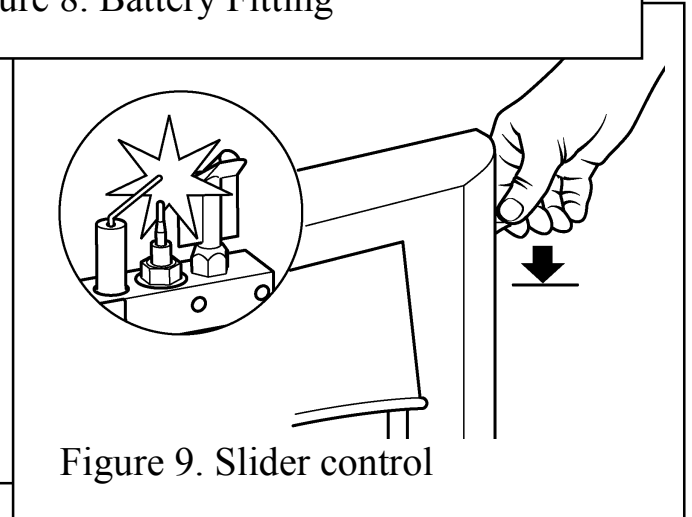


Figure 9. Slider control

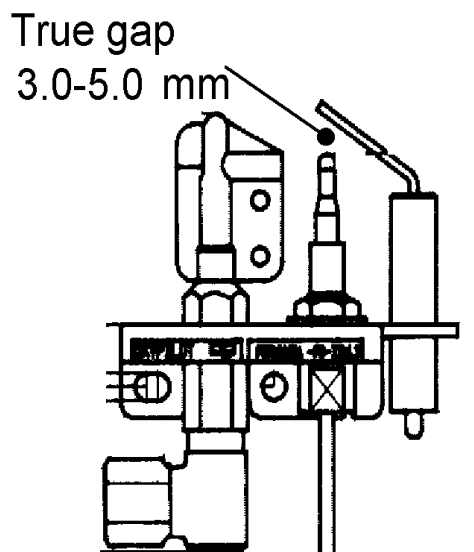
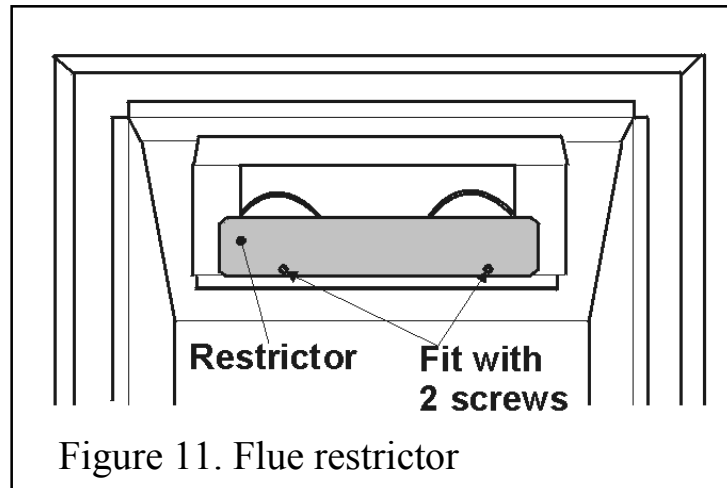


Figure 10. Pilot ignition system

8. APPLIANCE PREPARATION

8.1 The Flue Restrictor

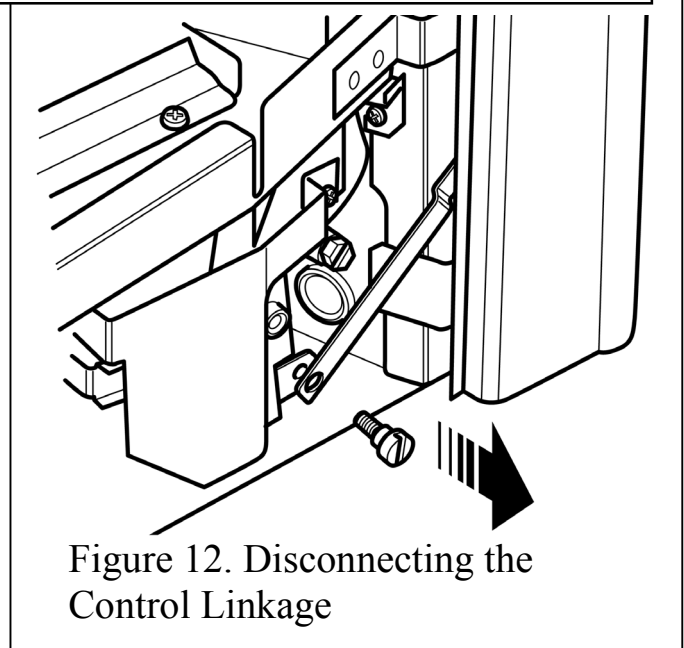
This appliance is supplied with a flue restrictor for use where the flue draught is excessive. **The restrictor must not be fitted where a precast flue or a 125mm flue liner is used.** For flue liners greater than 125mm and all other installations the restrictor should be fitted. There may however, be certain exceptional circumstances where fitting the restrictor causes the fire to fail the spillage test. In such cases the restrictor will have to be removed. After removal conduct the spillage check again. Fit the restrictor to the appliance flue outlet as shown in figure 11 using the two screws provided.



8.2 Appliance Preparation

1. Remove any transit tape and packing and inspect for any evidence of mishandling which might affect the performance. Each unit is flame tested before it leaves the factory and as a result there may be slight discoloration around the burner ports. There may also be slight thermal cracking across the burner surface that is perfectly normal and is not detrimental to performance.

2. Disconnect the control linkage from the burner unit by removing the shouldered screw that joins the control-linking bar to the control pivot plate (See figure 12).

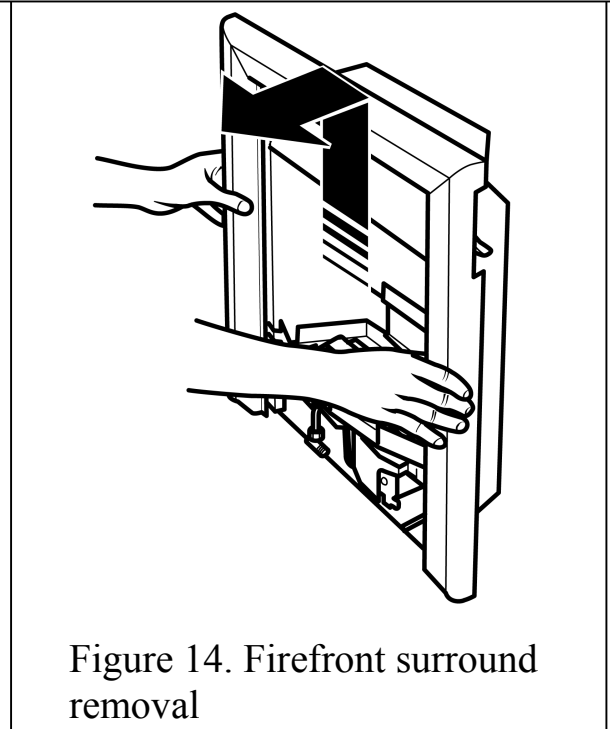
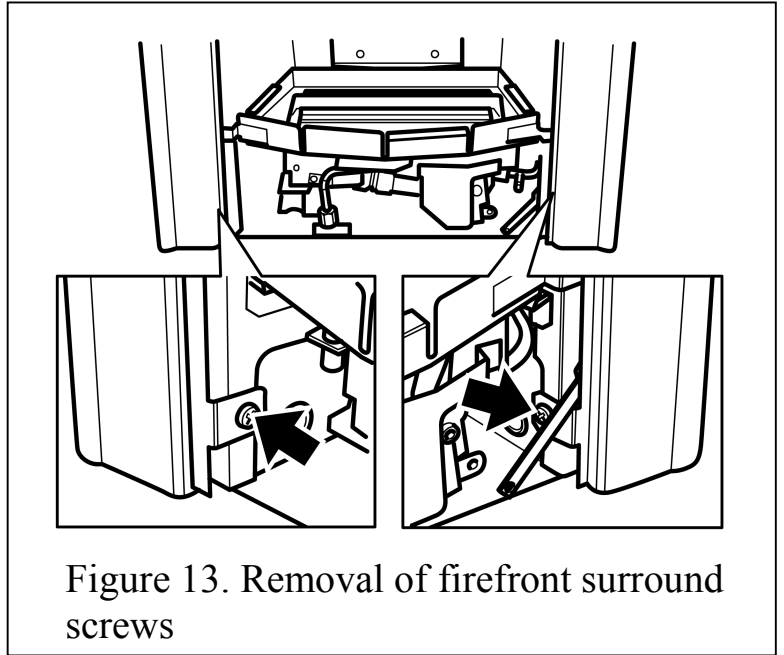


INSTALLER'S GUIDE

3. Remove the two firefront surround securing screws. These are located under the burner module on the side walls of the convection box (See figure 13)

4. There are two location brackets at the top of the firebox behind the firefront surround. Hold the sides of the firefront surround and lift upward and forward to release the firefront surround from the convection box (See figure 14).

5. Place the firefront surround in a safe place away from the work area.



INSTALLER'S GUIDE

8.3 Removing the burner module

Detach the burner unit from the convection box by removing two screws (See figure 15). Carefully remove the burner assembly by lifting and sliding forward from the convection box.

8.4 Fitting the foam seal

A foam seal is supplied which will need to be attached to the rear face of the firebox frame on all three sides. Ensure that all joints are butted together to prevent air gaps.

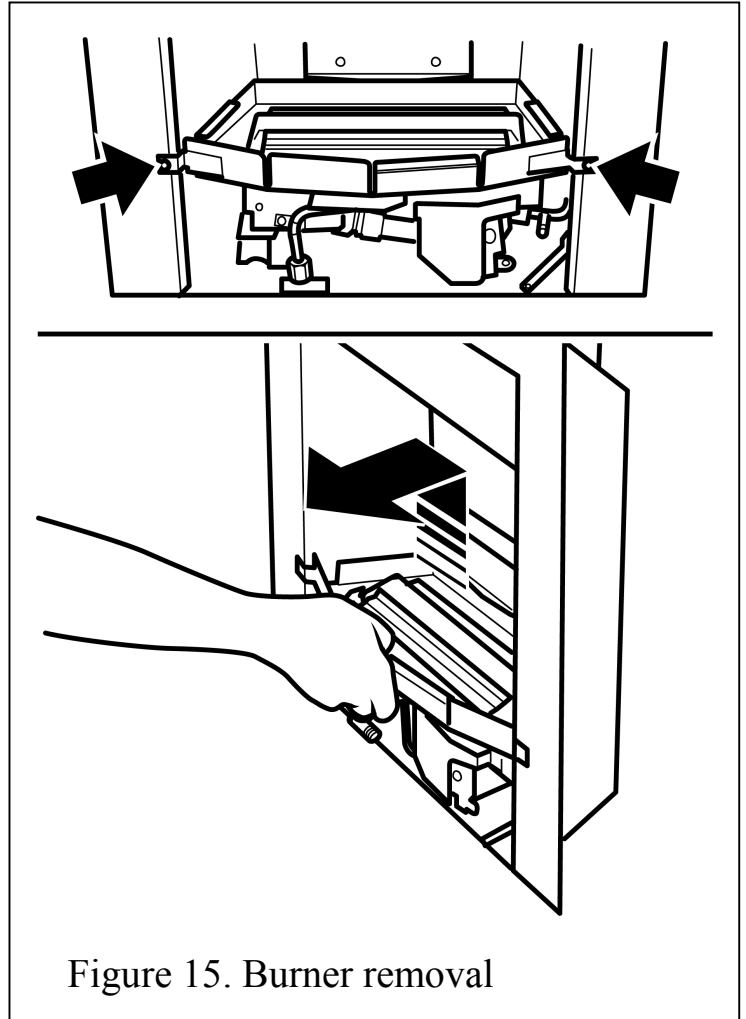


Figure 15. Burner removal

9. GAS SUPPLY CONNECTION

8mm rigid tubing must be used to connect the gas supply to the appliance. An olive and nut are provided for connection to the “T” connector on the appliance. The isolating elbow can be rotated to allow connection from either side or the rear. The isolating elbow includes a valve for isolating the gas supply.

9.1 Concealed Supply Pipe Connection

- If a concealed connection from inside the fireplace is required then, **before the appliance is fitted into the fireplace** it will be necessary to extend the supply line so that it will project through the grommet at the back of the convection box (near the left side) and run to the isolating elbow at the front. Cut a small slit in the grommet to allow the pipe to pass through. **Only slit the grommet if a rear concealed connection is to be used.**

- The pipe run from the supply line up to the rear opening in the convection box must be kept clear of the area which will be taken by the convection box when it is installed.

The convection box grommet position will allow a straight pipe to be connected directly to the isolating elbow. This will allow the convection box to be pushed back into the fireplace opening with minimal effort. The distance from the centre line of the appliance and fireplace opening to the centre line of the gas supply is shown in figure 16.

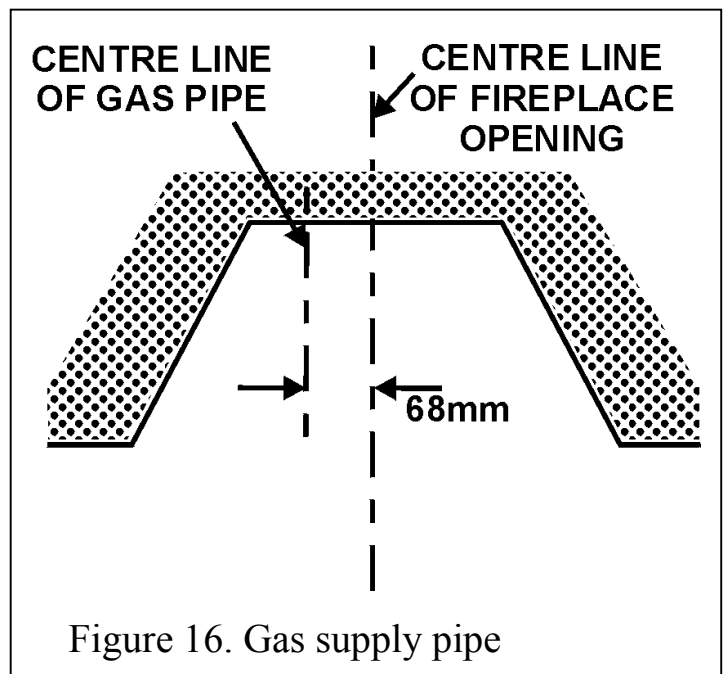


Figure 16. Gas supply pipe

10. FIREBOX INSTALLATION

10.1 Cable Retention

- Cables and eyebolts are supplied for the retention of the appliance. Ensure that the internal fireplace components are sufficiently sound to take the eyebolts and wall plugs. These should be located as shown in figure 17 using the wall plugs and a No.10 drill. Use only the fibre wall plugs supplied (or similar). **Never use plastic plugs instead of the fibre plugs supplied.**

- Assemble one end of a cable through the small round hole at the side of the appliance rear flue opening and lock it by positioning the cable end in the adjacent slot. Pass the other end of the cable through the eyebolt & then through the slotted hole near the lower rear corner of the appliance (See figure 18) Fit an adjuster as shown in figure 19. Repeat with the second cable at the other side.

- With the adjusters fully screwed in, carefully manoeuvre the appliance into the fireplace opening. Take up any slack on the cables, and tighten cable nipples into position.
- Tighten the appliance into the fireplace opening by turning the adjuster nuts to compress the sealing foam sufficiently to provide an effective seal. Do not overtighten. If

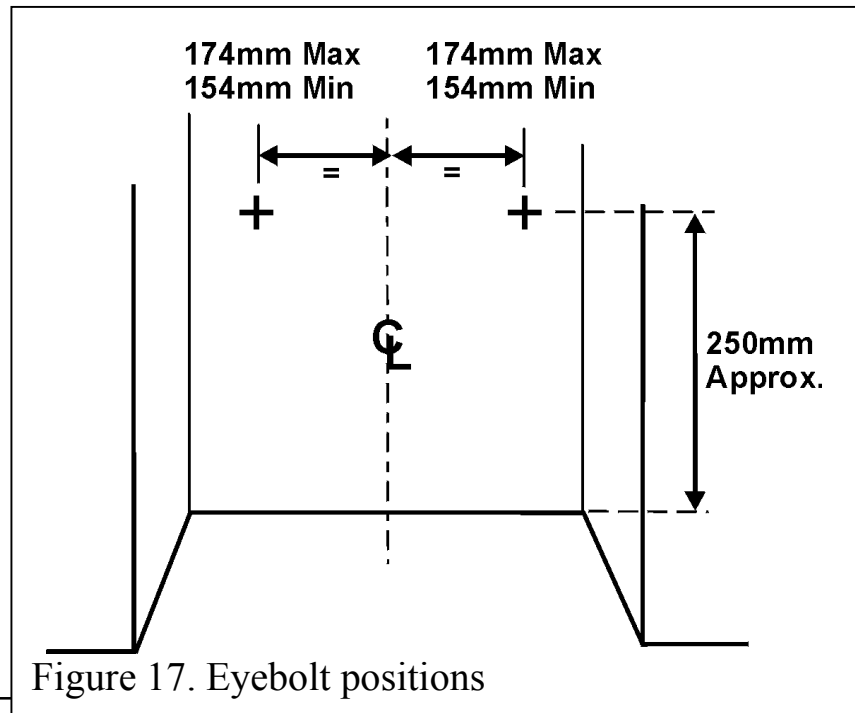


Figure 17. Eyebolt positions

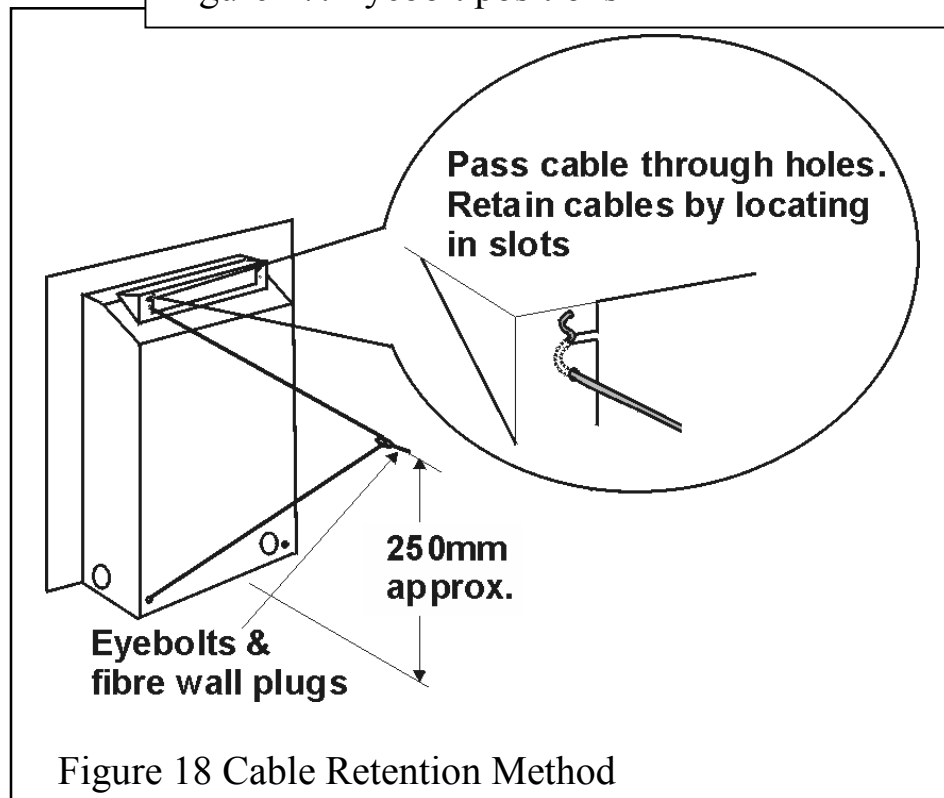


Figure 18 Cable Retention Method

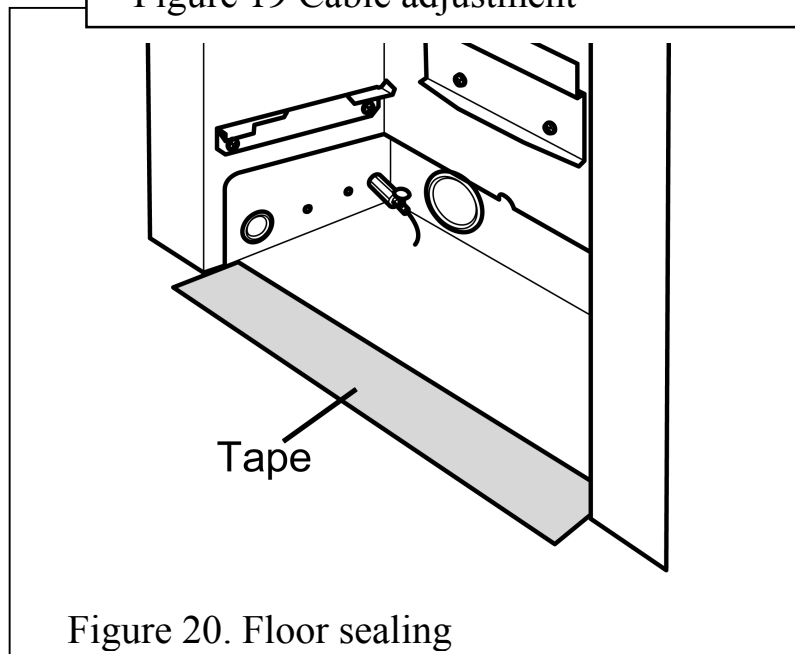
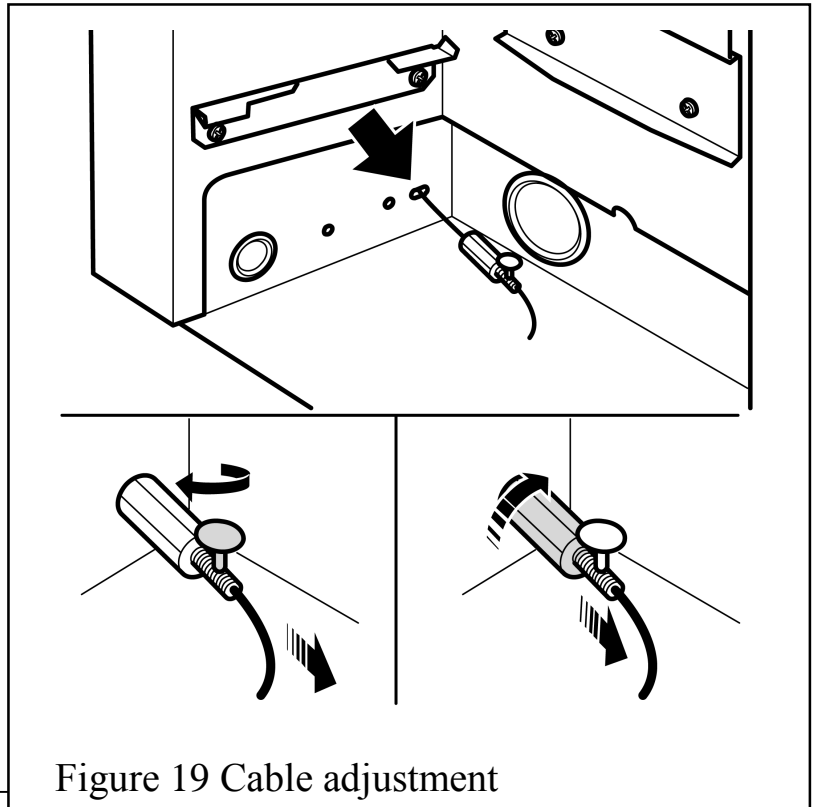
INSTALLER'S GUIDE

the sealing foam does not fully compress, then the adjusters and nipples may require to be slackened and the cable pulled up tighter before re-tightening the adjuster.

- Do not cut off any excess cable, instead coil the cable and push it into the gap between the inner and outer rear walls. It will be required for servicing purposes.

10.2 Floor Sealing

- Using the floor sealing tape supplied, seal the bottom of the convection box to the fireplace and hearth floor (See figure 20).



11. BURNER INSTALLATION

11.1 Fitting the burner

- Refit the burner unit to the appliance. When locating the burner unit the right side of the burner must be located first. The convector box has a recess in it for the right hand pipe to sit in (See figure 21). Secure using the two screws removed previously.
- Connect the supply line to the appliance.
- Pressure check the installation pipework for gas soundness. In the United Kingdom check in accordance with the current edition of BS6891. In the Republic of Ireland check in accordance with the rules in force. A long brush may be required to reach some joints.

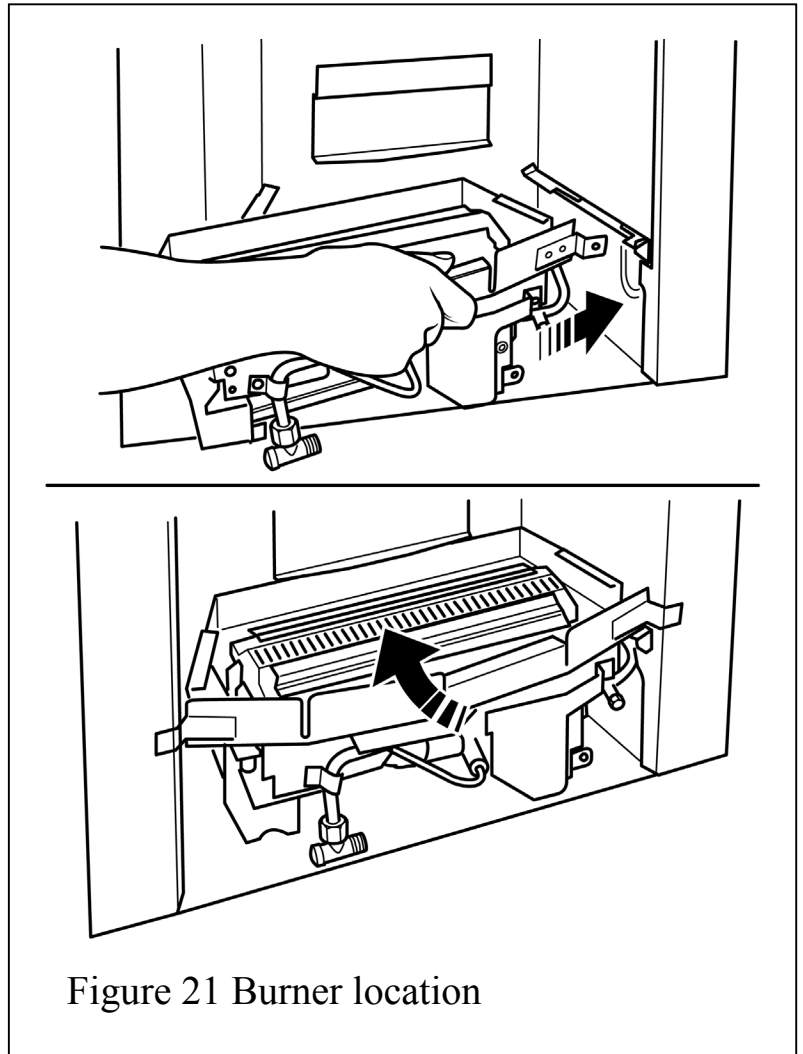


Figure 21 Burner location

11.2 Fitting the firefront surround

1. Slide the control button upwards as far as it will go. Make sure that the bottom of the linking bar is higher than the bottom of the front surround.

Place the front surround against the fireplace front surface so that the two retaining plates at the back of the surround are directly above the two upper retaining brackets at the top of the convection box. Lower the surround unit making sure that the retaining plates locate fully over the brackets on the convection box (See figure 22).

2. Swing the bottom control linking bar towards the centre of the fire to clear the right side of the surround. Slide the surround unit sideways, if necessary, to align the bottom fixing holes with those in the convection box. Fix the bottom of the surround unit to the convection box with two screws (See figure 23).

3. Connect the control linkage to the control pivot plate using the shouldered screw removed previously (See figure 24).

11.3 Preliminary Burner Checks

Some burner operations can be checked at this stage. Checking now will mean that less disassembly will be required if any problems are found. ***A full check should still be made, however, after final installation.***

1. If closed, open the isolating valve at the inlet elbow.
2. Depress the slider knob as far as it will go and hold in this position. This should close the ignition circuit and (now that the gas is

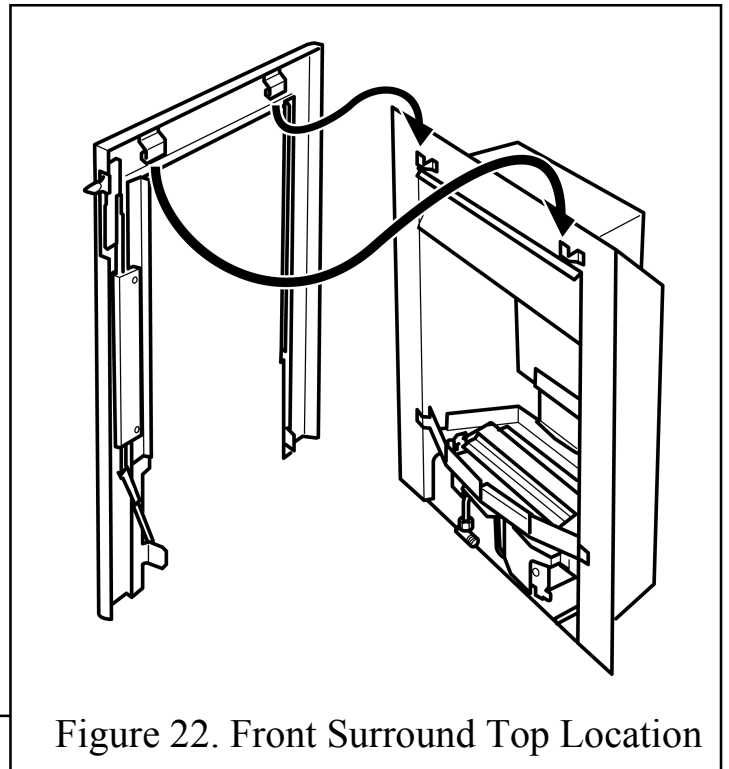


Figure 22. Front Surround Top Location

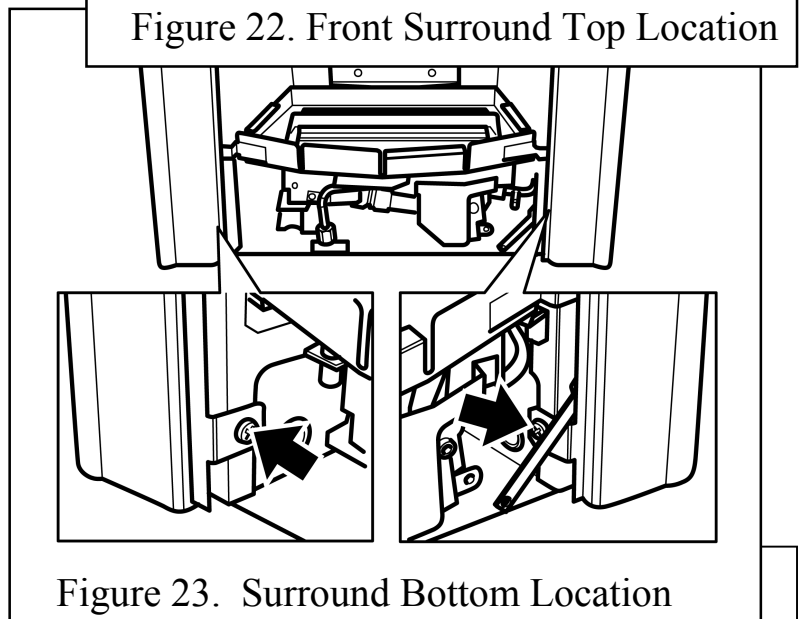


Figure 23. Surround Bottom Location

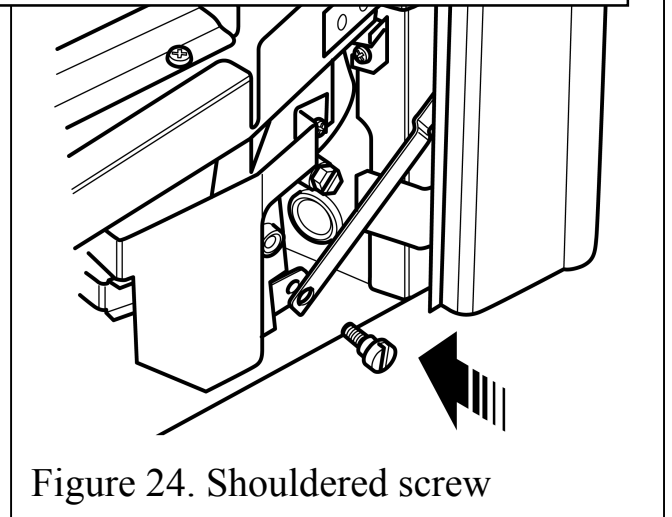


Figure 24. Shouldered screw

INSTALLER'S GUIDE

connected) simultaneously open the gas tap allowing the gas to flow to the pilot. Wait a few seconds while the air is purged. The electronically generated sparks should light the pilot. The pilot should then light the main burner at its low setting. There may be a delay of up to four seconds between the pilot lighting and ignition of the gas at the main burner. This is normal and is due to the time required to fill the main burner compartment with sufficient gas for ignition.

3. When the burner is operating properly, gradually slide the control knob upwards. The burner flames should gradually increase until the knob is nearly at its highest position. You should feel some resistance when the slide button reaches the maximum burner flame position. Sliding further upwards until the knob comes to a stop should then turn the burner and pilot off. **When the above checks have been completed close the isolating valve on the inlet elbow.**

4. If the above checks are satisfactory, continue with the installation. If not, check the control and ignition circuitry and components as described in the servicing section of this manual.

11.4 Reference Pressure Check

The appliance is pre-set to give the correct heat input at the inlet pressure shown in the 'Appliance Data' section of this manual. No adjustment is necessary.

1. Check the burner pressure by fitting a pressure gauge at the test point. The test point is on the pipe situated below the bottom right corner of the burner unit (See figure 25).

Check the pressure with the appliance alight and set at maximum output.

2. After checking, turn off the appliance. Remove the pressure gauge and replace the test point sealing screw. Relight the appliance.

Turn to the maximum output position and test around the sealing screw for gas soundness with a suitable leak detection fluid.

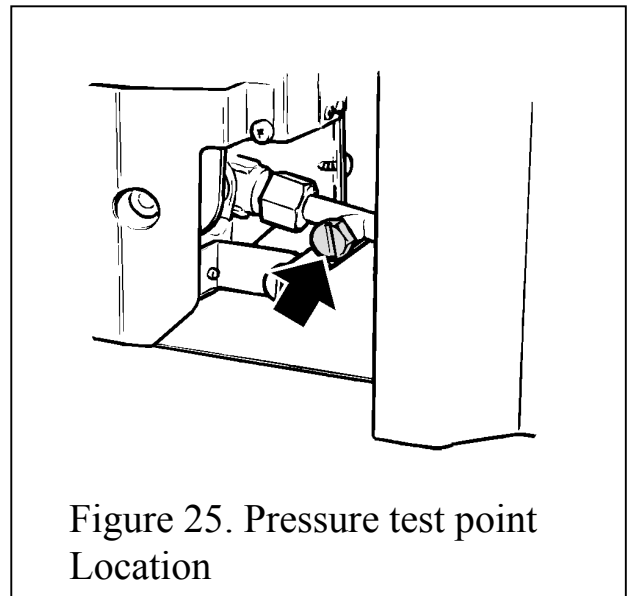


Figure 25. Pressure test point Location

INSTALLER'S GUIDE

12. FITTING THE CERAMICS

1. Fit the burner tray trim over the front rim of the burner tray. Push the trim fully down. See figure 26.
2. Place the rear base coal in the firebox. It should rest on the ledges at the sides and back of the firebox and its rear face should touch the rear ceramic wall. See figure 27.
3. Place the front base coal in the firebox with its bottom front locating over the front rim of the firebox. Pull the coal forward so that it locates immediately behind the front rim of the firebox. See figure 28.

There are two types of loose coals. These are identified with the letter "A" or "B" on the underside of the coal. There are three "A" coals and two "B" coals.

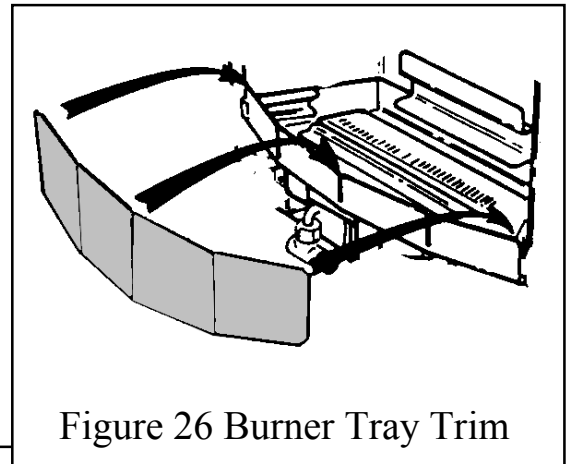


Figure 26 Burner Tray Trim

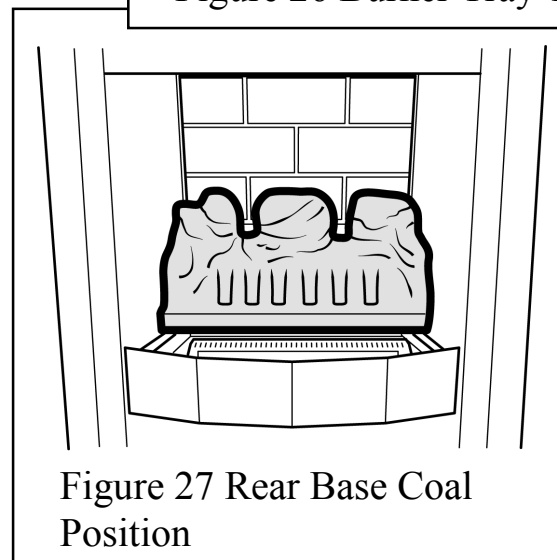


Figure 27 Rear Base Coal Position

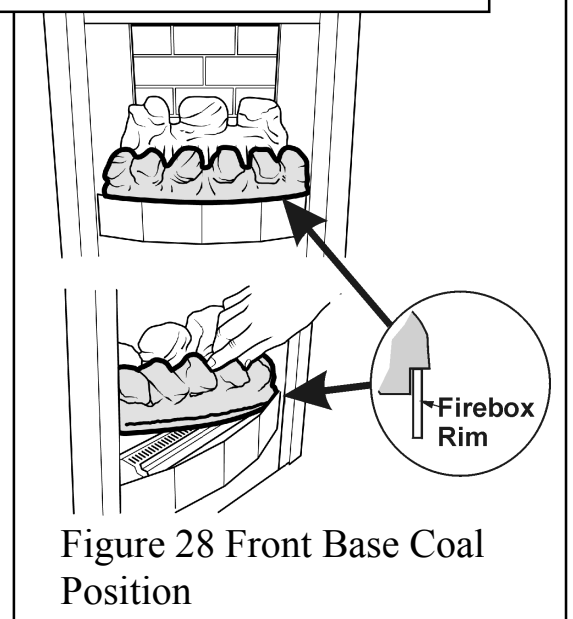


Figure 28 Front Base Coal Position

INSTALLER'S GUIDE

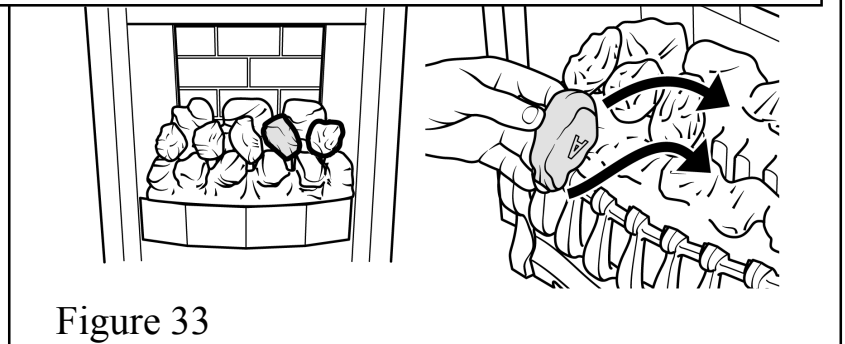
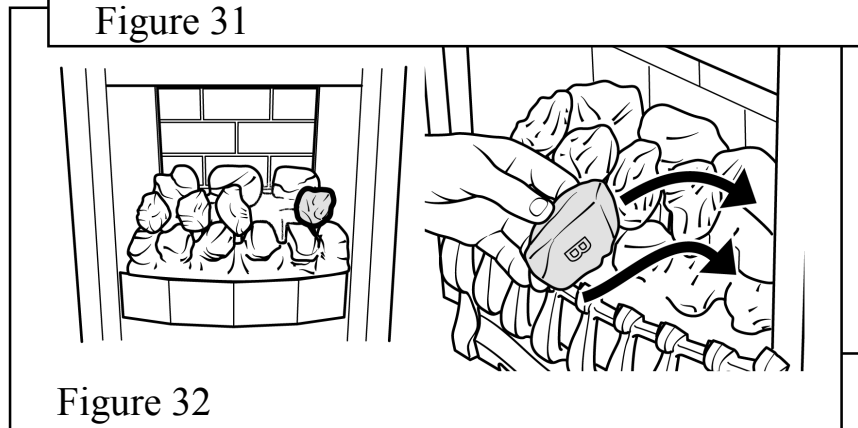
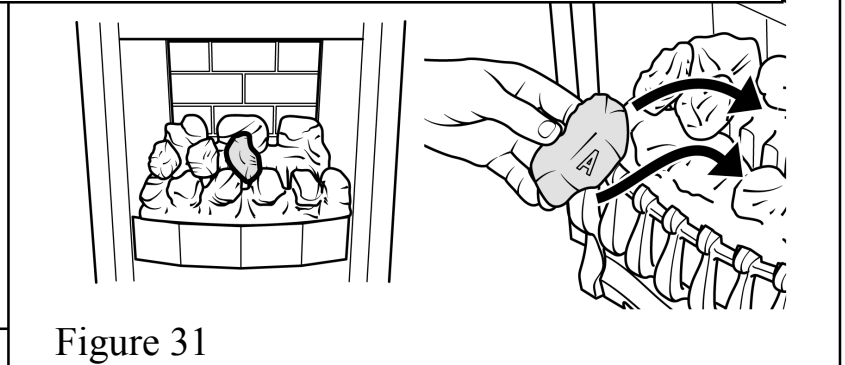
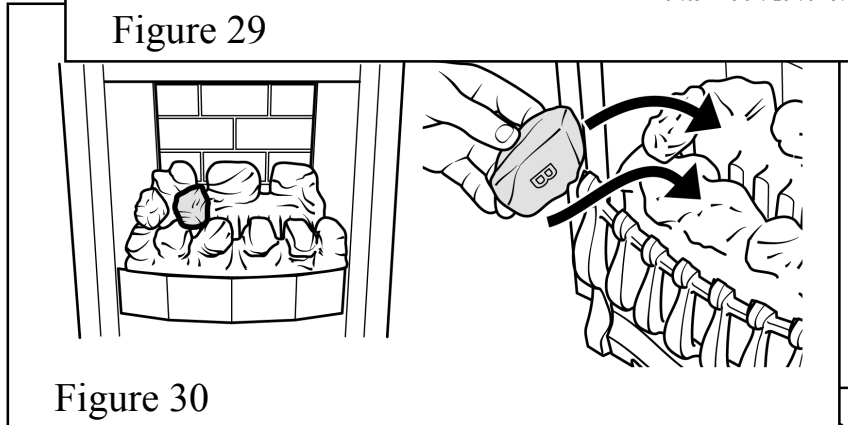
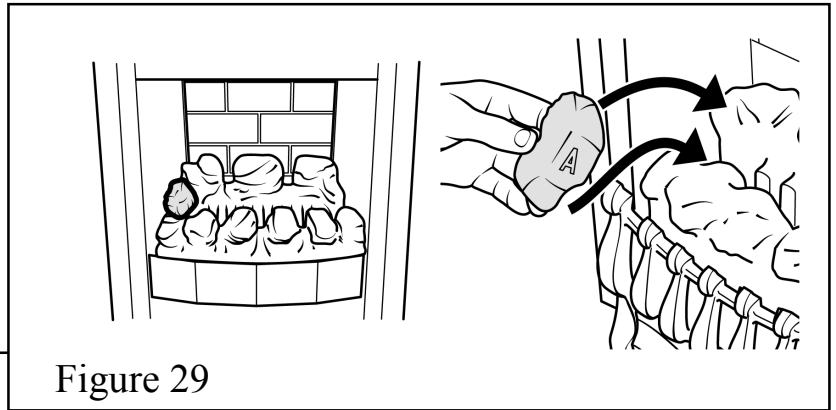
4. Place a type “A” coal between the front and rear base coals with the letter “A” upright and so that the coal is against the left side of the firebox. See figure 29.

5. Place a type “B” coal between the front and rear base coals as shown in figure 30. The letter “B” should be upright.

6. Place a type “A” coal between the front and rear base coals with the letter “A” upright. The top of the coal should rest against the centre coal of the rear base coal as shown in figure 31.

7. Place the remaining type “B” coal at the right side of the firebox between the front and rear base coals. The letter “B” should be upright. The coal should touch the right side of the firebox. See figure 32.

8. Place the remaining type “A” coal between the front and rear base coals. The letter “A” should be upside down with its rear face between the right and centre coals of the rear base coal. Angle the coal so that the gap between it and the type “B” coal to its right is appreciably larger than the gap between it and the type “A” coal to its left but do not have it touching the type “A” coal. This will give the best flame effect. See figure 33.



13. CONTROL CHECKS

13.1 Check the **FireSlide** Control

The control position markings on the front surround are shown in figure 34.

Please note that, when operating the fire for the first time, some vapours may be given off which could set off smoke alarms in the vicinity. These vapours are quite normal with new appliances. They are totally harmless and will disappear after a few hours use.

When first turned on from cold, the flames will appear predominantly blue.

1. Make sure the slider button is at the off position (at topmost position marked "O" on the front surround).
2. Open the isolating valve on the inlet elbow.
3. Slide the button to the bottom (ignition) position marked ↓. Retain in this position to ignite the pilot. The burner should ignite at its lowest setting within 4 seconds of the pilot igniting. Keep at this position for a further 10 seconds to allow the pilot flame to stabilise.
4. Release the button. The button should automatically spring up to the low heat position. If the flames go out at this stage or when checking the rest of the setting positions, try the full lighting sequence again. If the flames fail after two attempts, investigate the pilot unit.
5. Gradually slide the button up to increase the burner setting. The burner should be at its maximum setting at the high heat position shown in figure 34. You should feel a check to the button movement at this position.
6. Slide the control button up past the high heat position to the off ("O") position at the top of the slide slot. Both pilot and main burner should go out.

While cooling the coals may make some crackling noises. This is quite normal.

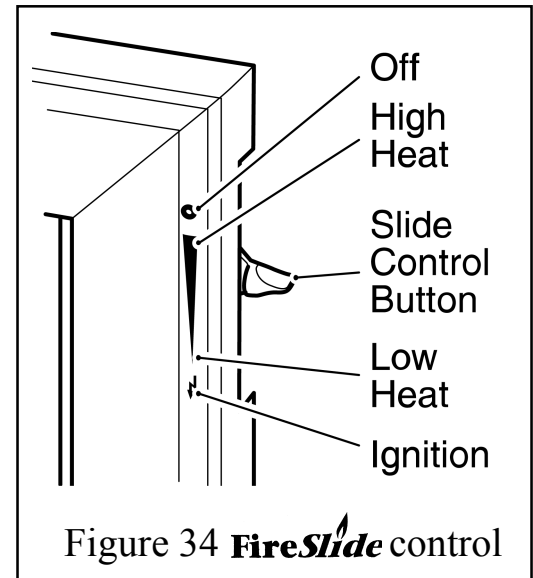


Figure 34 **FireSlide** control

INSTALLER'S GUIDE

13.2 Fitting the Firefront casting

1. Fit the fire front casting to the front surround. Locate the two screw heads at the rear top corners of the casting through the keyhole slots at the inner sides of the surround. If the screw heads do not project enough or project too far, the screws can be adjusted. Lower the casting so that it rests on the hearth. See figure 35.

2. Place the bottom front cover casting in position below the fire front casting.

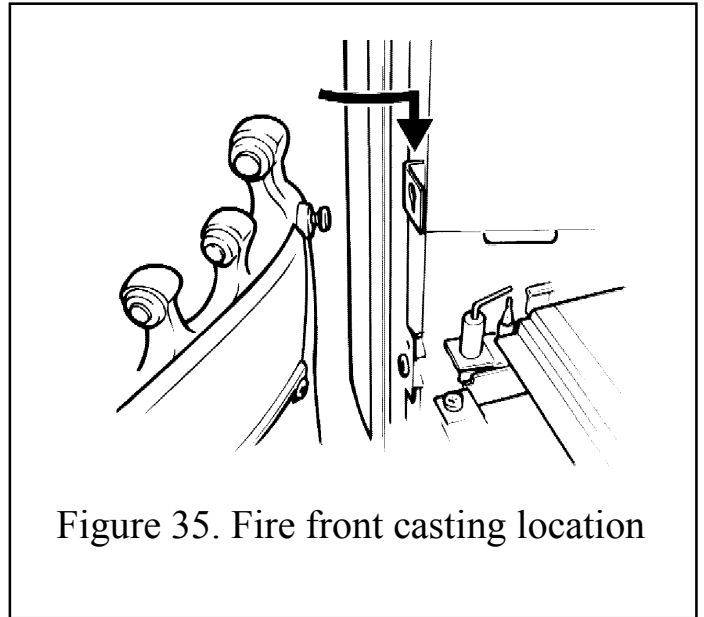


Figure 35. Fire front casting location

13.3 Check for Spillage

A spillage check must be made before leaving the installed appliance with the customer. Make this check with the appliance fully installed with the ceramic fuel effects and front surround in position.

- Close all doors and windows in the room containing the appliance.
 - Light the appliance and set the slide control to the maximum burning position.
 - Leave the appliance on for five minutes.
 - Place the smoke match into the appliance canopy.
- See Figure 36.

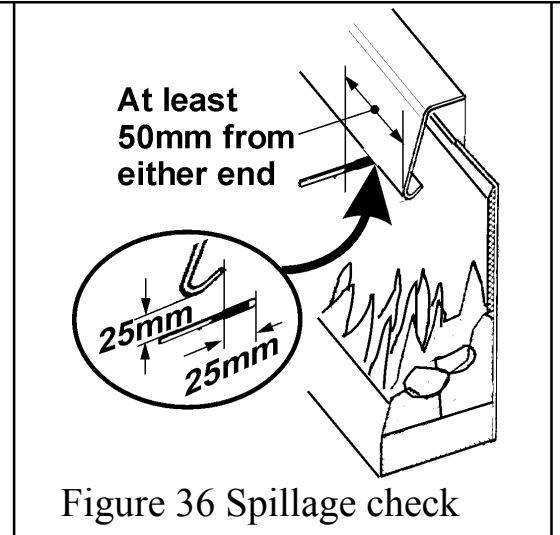


Figure 36 Spillage check

• The installation is satisfactory if the smoke is drawn into the appliance. If the smoke is not drawn into the appliance, leave the appliance alight at the maximum setting for a further ten minutes and then repeat the test. If smoke is still not drawn into the appliance, inspect the sealing to the fireplace surround. If the sealing is satisfactory but the appliance is installed with the flue restrictor (see section 8.1), remove the restrictor, reseal the appliance and retest. If smoke is still not drawn into the appliance, **disconnect the appliance and seek expert advice.**

• If the above test is satisfactory, open all internal connecting doors, hatches, etc., in the room. Keep all doors and windows that open to the outside of the building closed. Recheck for spillage as above. If an extractor fan is installed in the same room as the appliance or a connecting room, check that spillage does not occur with the fan operating and all doors and other openings between the fan and the appliance open. If the smoke is drawn into the appliance, continue with the installation. If the test is not satisfactory, **disconnect the appliance and advise the customer of the cause of failure.**

13.4 Flame Supervision & Spillage Monitoring System

This pilot unit includes a system that will automatically shut off the gas supply if the pilot flame goes out or if there is insufficient oxygen due to spillage or poor ventilation. Check that the system operates properly as follows: -

1. Light the appliance. Set the slide control to the maximum burning position and leave for one minute.
2. Set the control to the Low burning position. Isolate the gas supply at the inlet elbow. The pilot and main burner will go out. **Note the time when the pilot goes out.** Listen for a snap sound at the gas tap. **Note the time when the sound is heard.** An electromagnetic valve shutting off the gas supply through the tap causes this sound. The valve is located in the body of the tap. The valve should operate **within 60 seconds of the pilot going out.** If the valve does not operate within this time limit do not allow the appliance to be used until the fault has been corrected.

This monitoring system must not be adjusted, bypassed or put out of operation. This monitoring system, or any of its parts, must only be exchanged using authorised parts.

3. Open the isolating valve on the inlet elbow. Screw on the end cap and test for leaks.
4. Set the slider to the "Off" position.

INSTALLER'S GUIDE

14. FINAL REVIEW

1. Visually inspect the appliance. Clean off any marks incurred during installation.
2. Advise the customer how to operate the appliance. Point out that lighting instruction details are on the metal plate attached at the bottom of the appliance (Leave the plate visible in front of the bottom front cover as a reminder).
3. Explain to the customer that the appliance has a flame failure & spillage monitoring system. Point out the explanation of this system shown in the users instructions under "Operating the fire". Advise that if the fire goes out for any reason, wait at least three minutes before relighting. Stress that if the monitoring system repeatedly shuts off the fire, the appliance should be switched off and a specialist should be consulted.
4. Advise the customer that they should read their Owner's guide before operating the fire and always follow the advice in the section headed "Cleaning".
5. **Stress that no extra coals must be added over and above those supplied with the appliance and that any replacements must only be the authorised spares. Warn that ignoring this advice could cause incomplete clearance of the products of combustion with consequent health hazards.**
6. Advise the customer that the appliance will operate to its maximum potential if the flue is primed during the first 20 – 30 minutes of use. To do this, simply slide the control to its highest setting. This will also burn off any carbon deposits that may have formed during previous use.
If using the appliance for long periods it is beneficial to change between settings. This will also help to remove any carbon deposits that may form during use.
7. Recommend that the appliance should be serviced by a competent person (In the UK preferably a CORGI registered person) at least annually.
If the appliance is in premises in the United Kingdom occupied by a tenant, point out that by law a landlord must have any gas appliance, flue and pipework which is situated in a tenant's premises checked for safety at least every 12 months.
8. Advise that the fire may give off a slight odour while new. This is quite normal and it will disappear after a short period of use.
9. Hand the literature pack with this guide to the customer.

15. SERVICING & PARTS REPLACEMENT

Always turn off the gas supply before commencing any servicing (The appliance inlet “T” connector incorporates an isolating valve).

It is recommended that, at least once a year, the appliance is disconnected and the fireplace opening checked and cleared of any debris.

This product uses fuel effect pieces, burner compartment rear wall and gaskets containing Refractory Ceramic Fibres (RCF), which are man-made vitreous silicate fibres. Excessive exposure to these materials may cause irritation to eyes, skin and respiratory tract. Consequently, it is important to take care when handling these articles to ensure that the release of dust is kept to a minimum. To ensure that the release of fibres from these RCF articles is kept to a minimum, during installation and servicing we recommend that you use a HEPA filtered vacuum to remove any dust and soot accumulated in and around the fire before and after working on the fire. When replacing these articles we recommend that the replaced items are not broken up, but are sealed within a heavy duty polythene bag, clearly labelled as RCF waste. This is not classified as “hazardous waste” and may be disposed of at a tipping site licensed for the disposal of industrial waste. Protective clothing is not required when handling these articles, but we recommend you follow the normal hygiene rules of not smoking, eating or drinking in the work area and always wash your hands before eating or drinking.

- Check that the appliance is clean and that soot or debris is not blocking the gaps between the coals causing an imperfect flame.
- Check that soot or debris is not impairing the electrode spark or pilot burner.
- Check that soot or debris is not blocking any of the slots in the main burner.
- After servicing, make sure that the ceramic rear wall and coals are replaced correctly as described in the installation instructions.
- **Always test for gas soundness and spillage after servicing the appliance.**

15.1 To Replace Burner Plaques

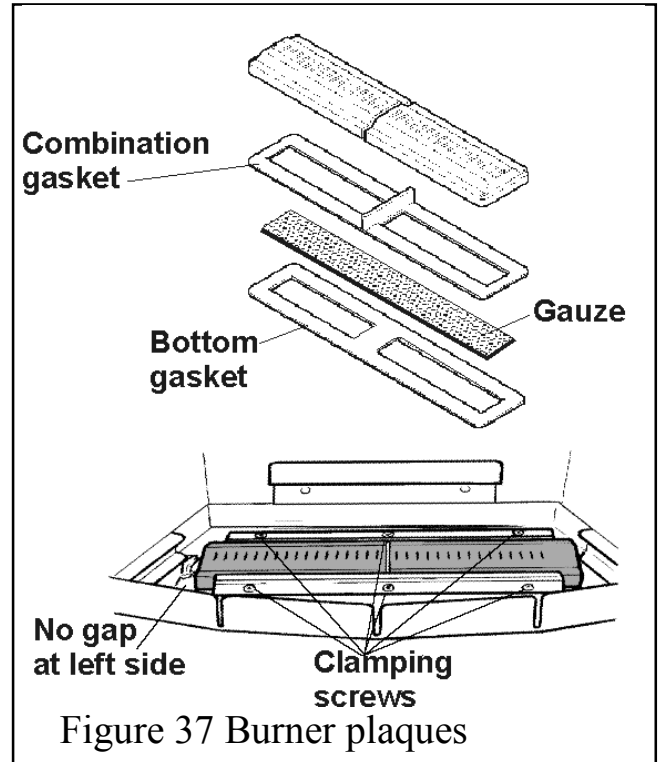
- Remove the five loose coals, front base coal, and rear base coal.
- Remove the plaque clamping strips by detaching 6 screws.
- Remove the plaques and the combination gasket between and under the plaques. If necessary remove the gauze and the gasket beneath it.
- If necessary fit a new gasket below the gauze. Clean and replace the gauze. Fit a new combination gasket below the plaques. Push the gasket ends inwards to form a dividing gasket between the plaques.
- Place the new left hand plaque in position. The left side of the plaque must touch the

INSTALLER'S GUIDE

inside edge of the retaining flange at the left side of the burner well.

- Place the new right hand plaque in position. Make sure that the centre section of the combination plaque is between the two plaques. If there is any play between the plaques and the end retaining flanges, push the plaques firmly to the left squeezing the centre section of the combination gasket between the two plaques. Any gap should be between the right side of the plaque and the right side-retaining flange.
- Fit the front and rear plaque clamping strips. Make sure that the plaques are as far to the left as possible. **It is important that the left side plaque is accurately positioned so that it has the correct relationship to the pilot.** Fully tighten the clamping strips.

- Refit the ceramic fuel effects and rear wall as described in this manual.



15.2 To Remove the Firefront surround

- Disconnect the control linkage from the burner unit by removing the shouldered screw that joins the control-linking bar to the control pivot plate (See figure 13).
- Remove the two firefront surround securing screws. These are located under the burner module on the side walls of the convection box (See figure 14)
- There are two location brackets at the top of the firebox behind the firefront surround. Hold the sides of the firefront surround and lift upward and forward to release the firefront surround from the convection box (See figure 15).
- Place the firefront surround in a safe place away from the work area.

15.3 To Remove the Complete Burner Unit

- Remove the five loose coals, front base coal, and rear base coal.
- Support the inlet isolating elbow to avoid straining the pipework and disconnect the appliance from the elbow.
- Remove the firefront surround as in section 15.2

INSTALLER'S GUIDE

- Detach the burner unit from the convection box by removing two screws (See figure 16). Carefully remove the burner assembly by lifting and sliding forward from the convection box.
- Replace in the reverse order.

15.4 To Remove the Ignition Microswitch

See figures 38 & 39.

The ignition microswitch is stamped V4NT9C4YC

- Remove the bottom front cover and the fire front casting.
- Detach the microswitch cover by removing one screw and pulling clear of the location lug. See figure 38.
- Disconnect the leads from the ignition microswitch (The lower of the two microswitches - See figure 39).
- Detach the microswitch and insulation pad by removing two screws.
- Replace in the reverse order. Check that the microswitch operates correctly by fully closing it and observing that there are sparks at the pilot electrode.

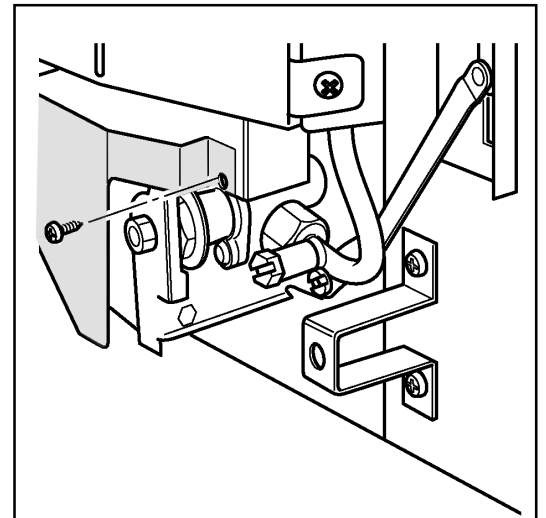


Figure 38. Microswitch cover removal

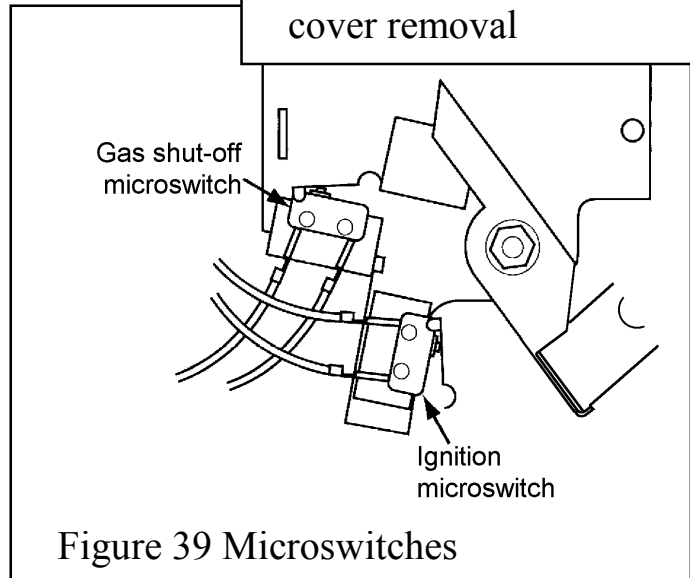


Figure 39 Microswitches

15.5 To Remove the Gas Shut-Off Microswitch

See figures 38, 39 & 40.

The gas shut-off microswitch is stamped V4NT9C2YCGPX or V4NT9C2YCAUX.

- Remove the bottom front cover and the fire front casting.
- Detach the microswitch cover by removing one screw and pulling clear of the location lug. See figure 38.
- Loosen the thermocouple nut to free the microswitch leads and pull the leads clear of the thermocouple interrupter block. See figure 40.
- Detach the microswitch assembly by removing two screws. See figure 39.

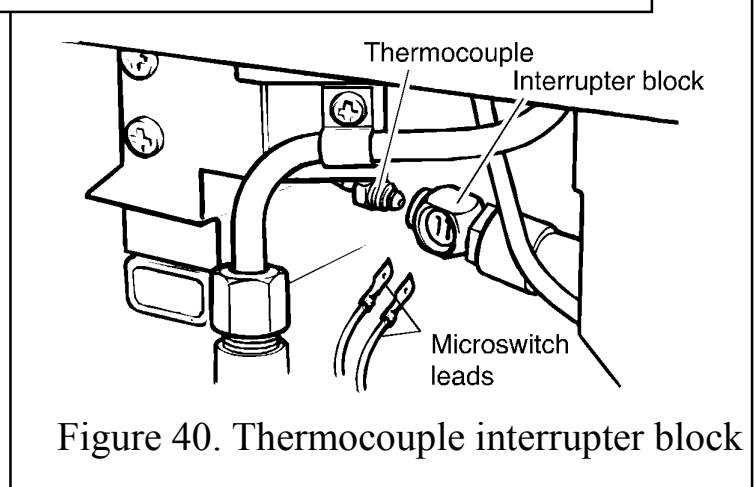


Figure 40. Thermocouple interrupter block

INSTALLER'S GUIDE

- Replace in the reverse order. When refitting the leads to the interrupter block, make sure that they are secured firmly to give a good electrical contact.

15.6 To Replace the Control Slide Knob

- Remove the firefront surround - See section 15.2.
- Detach the slider control from the firefront surround by removing two screws (See figure 41)
- Detach the control slide knob from the extension bracket by removing two screws (See figure 42).
- Refit in the reverse order.

15.7 To Remove the Electronic Ignition Generator

- Remove the bottom front and fire front castings and front surround - See section 15.2
- Remove the battery.
- Remove the burner unit – see section 15.3.
- Remove the two leads to the microswitch and remove the spark lead, marking them if necessary to ensure that they are replaced on to the correct terminals.
- Remove the two fixing screws that attach the generator unit to the bracket. The igniter generator can now be exchanged.
- Refit in the reverse order.

15.8 To Remove the Thermocouple Interrupter Block

See figure 43.

- Remove the bottom front casting
- Detach the thermocouple from the interrupter block by unscrewing the thermocouple nut.
- Detach the two microswitch leads from the interrupter block.
- Remove the interrupter block by unscrewing from the gas shut-off tap.
- Refit in the reverse order. If the microswitch leads cannot be easily attached to the interrupter block when it is fully tightened to the gas shut-off tap, slacken it and rotate to allow the leads to be fitted. Retighten making sure that the leads remain in place in the

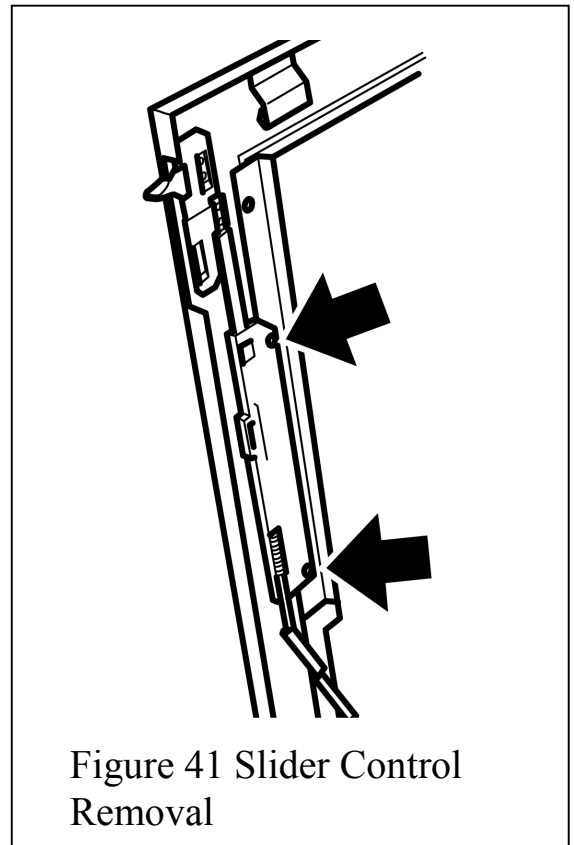


Figure 41 Slider Control Removal

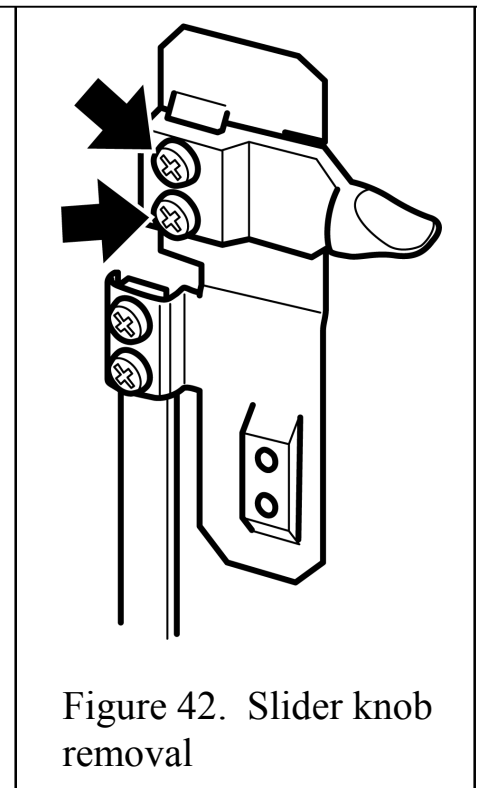


Figure 42. Slider knob removal

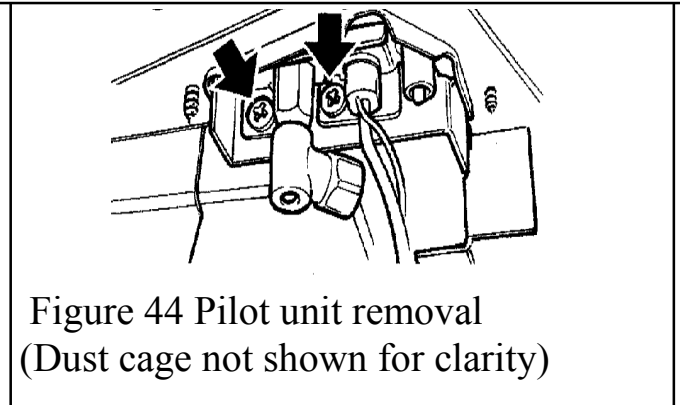
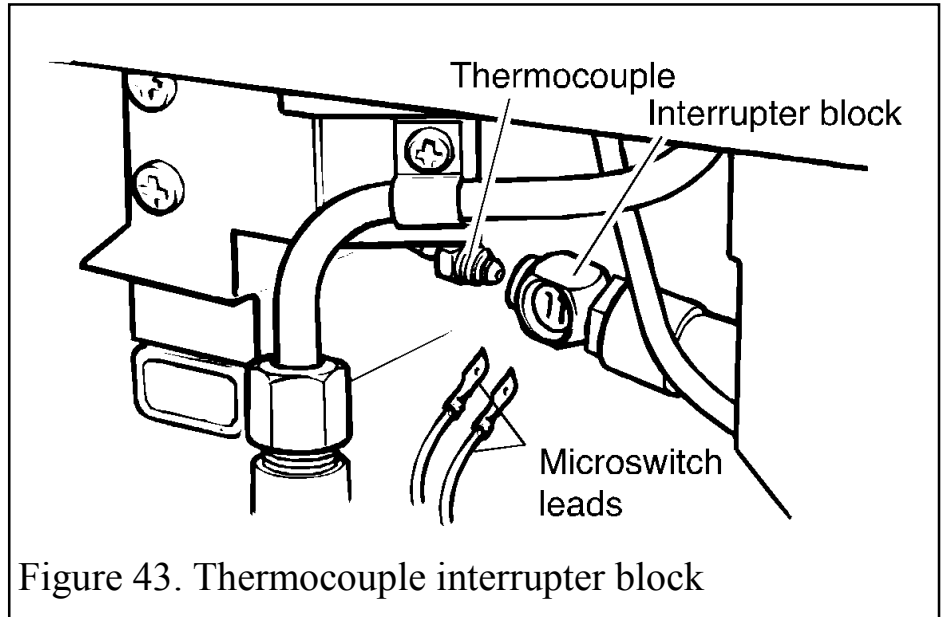
INSTALLER'S GUIDE

interrupter block. Fit and tighten the thermocouple nut making sure that the leads are secured in the interrupter block to give a good electrical contact.

15.9 To Remove the Pilot Unit

- Remove the burner unit - See section 15.3.
- Detach the pilot pipe from the gas shut-off tap.
- Detach the thermocouple from the interrupter block by unscrewing the thermocouple nut.
- Detach the electrode lead from the underside of the electrode tab.
- Remove the first screw securing the dust cage to the pilot unit & burner. Carefully remove the dust cage and place aside. See figure 44.
- Remove the second screw securing the pilot unit to the burner. Remove the pilot unit and place it aside. See figure 44.
- Disconnect the pilot pipe from the pilot unit elbow.
- Refit in the reverse order.

- Note: 1. The pilot unit is an atmosphere sensing device. It must be replaced as a whole assembly. Its individual components are not separately replaceable.*
- 2. Once removed, ensure that the dust cage is cleaned before refitting. Make sure that it locates squarely onto the pilot unit without any gaps between the cage edges and the pilot unit.*
 - 3. When the thermocouple is removed from the interrupter block, the microswitch lead terminals in the interrupter block will be loose. Make sure that they are properly secured to give a good electrical contact when retightening the thermocouple nut.*

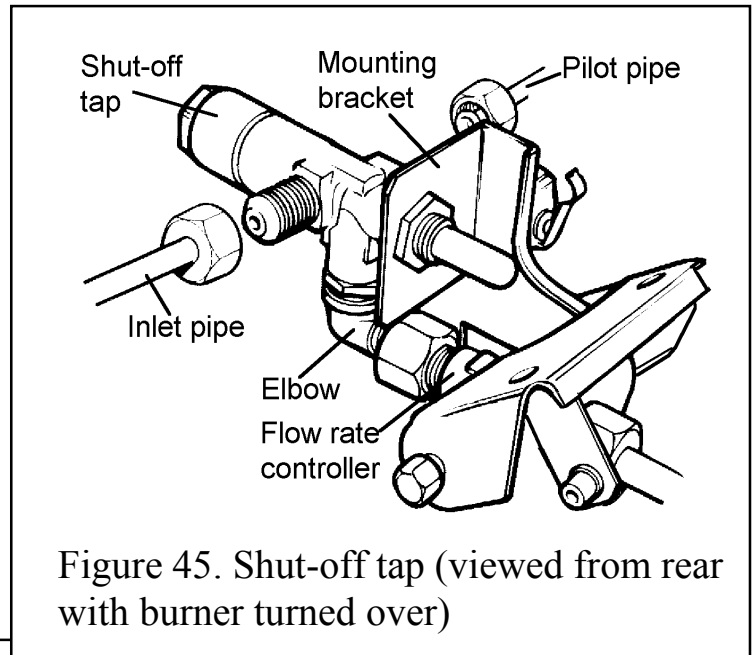


INSTALLER'S GUIDE

15.10 To Remove the Shut-Off Tap

See figure 45.

- Remove the burner unit - See section 15.3.
- Turn the burner unit upside down. Detach the thermocouple and interrupter block from the tap - See section 15.8.
- Detach the pilot pipe from the tap.
- Detach the inlet pipe.
- Remove the hexagonal nut securing the tap to the mounting bracket.
- Detach the elbow by unfastening the hexagonal nut connecting it to the flow rate controller. Lift the tap (complete with



elbow) clear.

- Loosen the hexagonal locknut securing the elbow to the tap. Remove the elbow by rotating it.
- If fitting a new tap, remove the hexagonal nut at the mounting bracket end of the old tap and fit to the replacement tap. Prior to refitting the elbow to the shut-off tap, apply an approved sealant to the elbow thread. Refit in the reverse order.

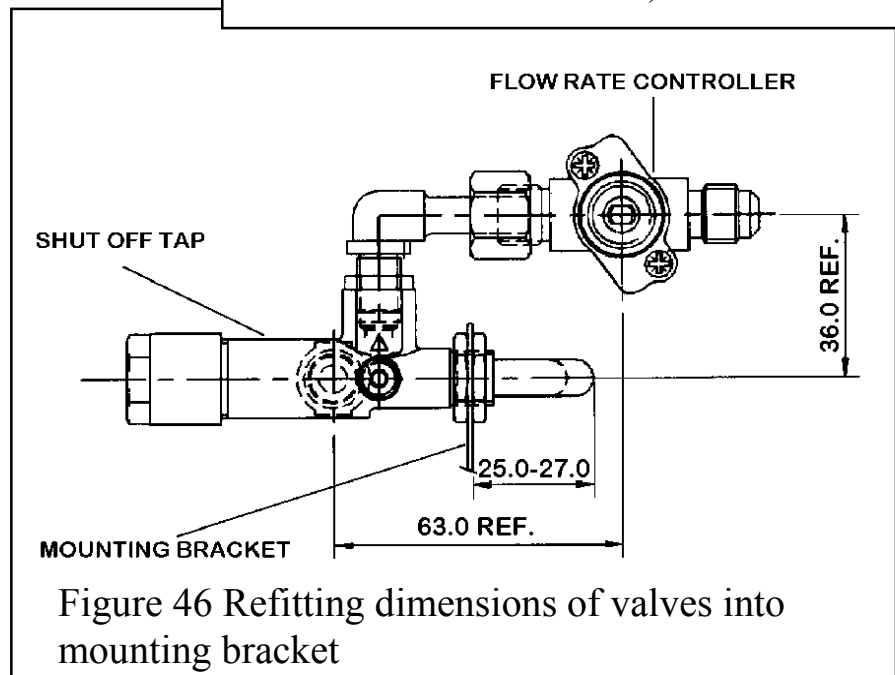


Figure 46 Refitting dimensions of valves into mounting bracket

Refer to figure 46 to ensure accurate refitting dimensions of the valves and subsequently into the mounting bracket. When refitting, make sure that the tap spindle is in the correct relationship relative to the control pivot bracket. Rotate the pivot bracket fully clockwise. The tap spindle should “bottom out” (i.e. the tap should be fully open) after the pivot bracket has actuated the ignition microswitch but before it has pushed the microswitch leaf against the microswitch body.

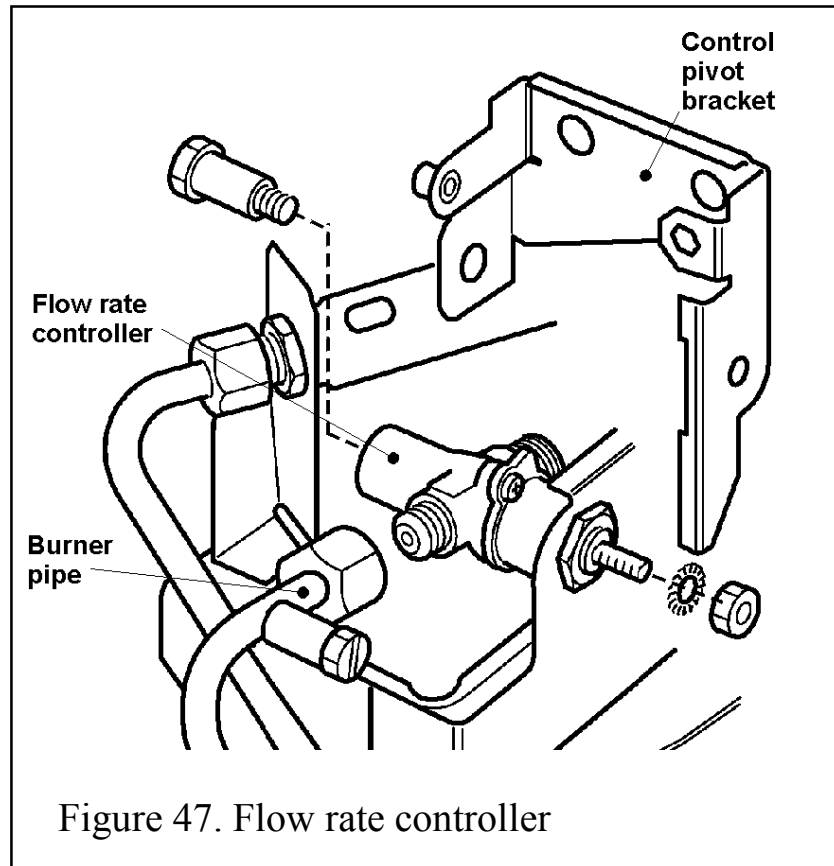
When refitting the thermocouple and interrupter block, make sure that the microswitch wires are properly secured to give a good electrical contact.

INSTALLER'S GUIDE

15.11 To Remove the Gas Flow Rate Controller

See figure 47.

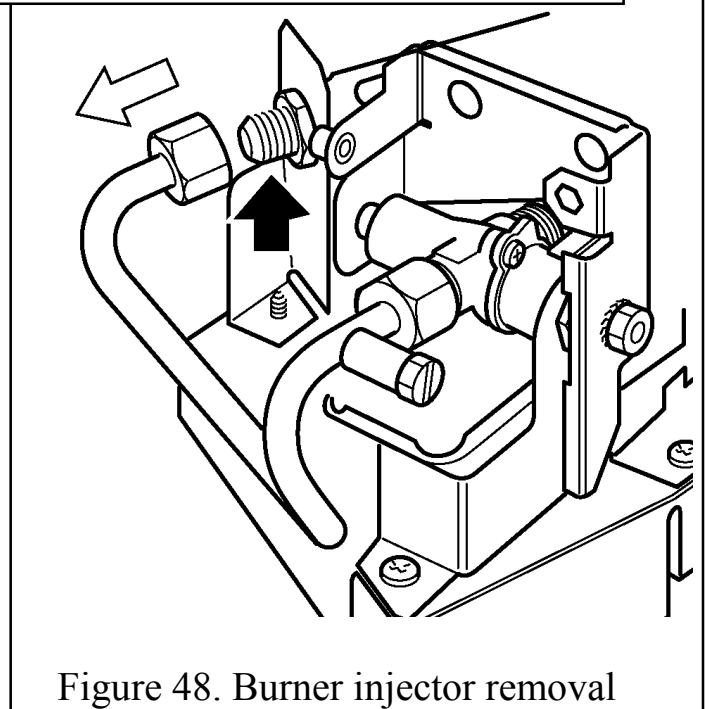
- Remove the burner unit - See 15.3.
- Detach the microswitch cover - See section 15.4
- Detach the shut-off tap as detailed in section 15.10.
- Detach the burner pipe from the controller. Support the controller while detaching to prevent excessive strain.
- Remove the nut and washer securing the control pivot bracket to the controller at the front. Support the pivot bracket while removing the nut to prevent possible damage to the microswitch.
- Remove the hexagonal bolt securing the control pivot bracket to the controller at the rear.
- Detach the control pivot bracket.
- Remove the hexagonal nut securing the controller to the front mounting bracket and remove the flow rate controller.
- Refit in the reverse order.



15.12 To Remove the Main Burner Injector

See figure 48.

- Remove the burner unit - See section 15.3.
- Disconnect the main burner pipe from the injector at the venturi end. If necessary, loosen the pipe at the flow rate controller end to swing the pipe clear of the injector.
- Unscrew the injector from the rear support bracket.
- Refit in the reverse order

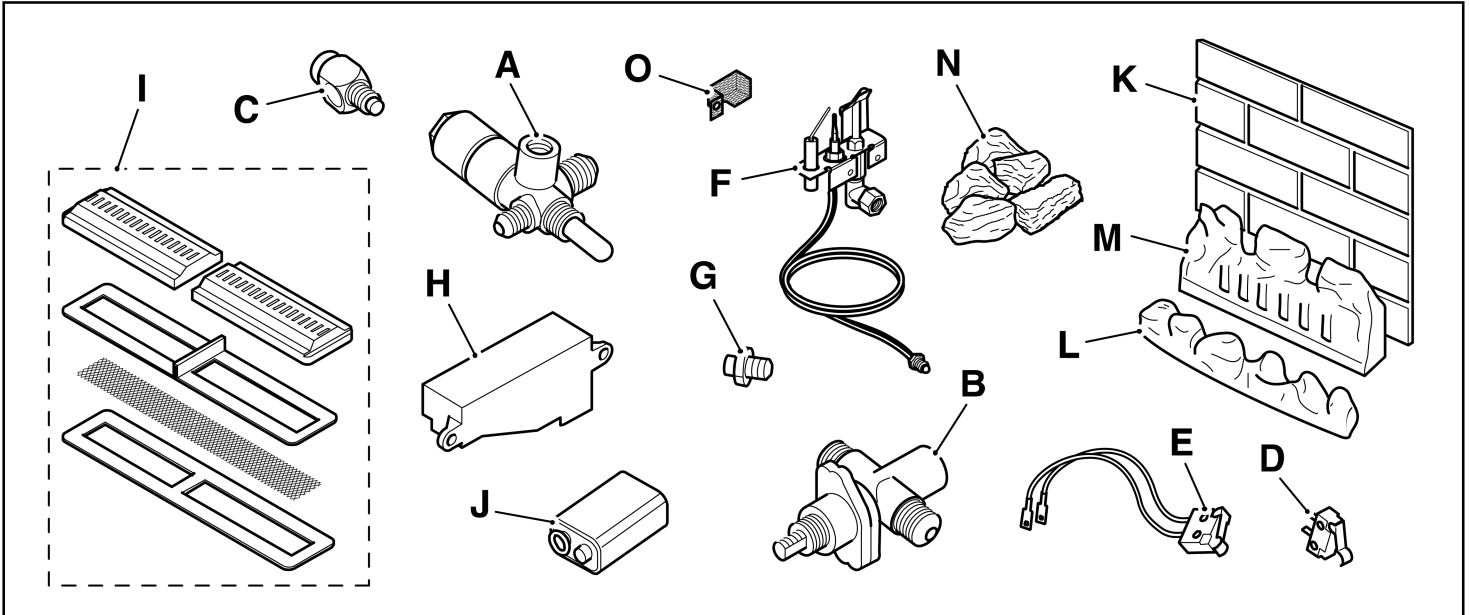


15.13 To Remove the Appliance from the Fireplace

- Remove the five loose coals, front base coal and rear base coal.
- Remove the burner unit as in section 15.3
- Slacken the hexagonal adjusters on the cable retainers and unscrew the thumbscrews to release the cables.
- Remove the floor sealing tape.
- Lift and slide the appliance clear from the fireplace.
- Refit as described in the relevant installation sections. Make sure gas soundness, sealing, spillage test and performance are satisfactory.

INSTALLER'S GUIDE

16. SHORT LIST OF SPARES



KEY NO.	DESCRIPTION	NO. OFF	MAKER'S PART NO.
A	Shut-off tap	1	0540899
B	Gas flow rate controller	1	0540919
C	Thermocouple interrupter block	1	0522389
D	Ignition microswitch	1	0540959
E	Gas shut-off microswitch	1	0540969
F	Pilot unit - <i>For Natural Gas Appliances</i>	1	0540979
	Pilot unit - <i>For Propane Gas Appliances</i>		0544929
G	Injector Bray cat 18 size 400 - <i>For Natural Gas Appliances</i>	1	0569519
	Injector Bray cat 15 size 170 - <i>For Propane Gas Appliances</i>	1	0571709
H	Igniter unit	1	0554949
I	Burner plaque & gasket set	1	0569439
J	Battery 9V Size "PP3"	1	0553389
K	Ceramic rear wall	1	0579139
L	Front coal	1	0579119
M	Rear base coal	1	0579129
N	Pack of loose coals	1	0582839
O	Dust cage	1	0567619